AIR QUALITY PROGRAM
301 39th Street, Bldg. #7
Pittsburgh, PA 15201-1811

Minor Source/Minor Modification
INSTALLATION PERMIT

Issued To:	**U. S. Steel Mon Valley Works** **Clairton Plant** 400 State Street Clairton, PA 15025-1855	**ACHD Permit#:**	**0052-I011a**
		Date of Issuance:	July 24, 2008
		Amended	February 15, 2018
		Expiration Date:	(See Section III.12)

Issued By: _____
JoAnn Truchan, P.E.
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AMENDMENTS:

DATE	*SECTION(S)*
2/15/18	Section I: Revised the responsible official and facility contact information; Condition IV.26.f.2 & 3: Removed the conditions; Condition IV.26.f.2: Added new condition; Condition IV.27: Moved from Section V; Condition V.A.1.gg, Table 1: Revised the emissions table; V.A.1.gg, Table 1-A: Added a separate SO_2 emission table & Revised Table 2 emissions; Condition V.A.2.s: Added condition on how to determine and comply with SO_2 emissions; Condition V.A.2.r: Removed the SO_2 emission stack testing requirement; Condition V.A.2.t: Removed the NOx emission stack testing and retain the CEM testing requirement; Condition V.A.3.a: Added the monitoring condition to monitor the H_2S grain loading in the fuel burned; Section VII: Revised the emission summary table and removed the sentence "this section is provided for informational purposes.

I. CONTACT INFORMATION

Facility Location:
U. S. Steel Mon Valley Works
Clairton Plant
400 State Street
Clairton, PA 15025-1855

Permittee/Owner:
U. S. Steel Mon Valley Works
Clairton Plant
400 State Street
Clairton, PA 15025-1855

Responsible Official: **Kurt Barshick**
Title: General Manager
Company: U. S. Steel Mon Valley Works
Address: P.O. Box 878
Dravosburg, PA 15034
Telephone Number: (412) 675-2600
Fax Number: (412) 675-5407

Facility Contact: **Jonelle Scheetz**
Title: Environmental Control Engineer
Telephone Number: (412) 233-1015
Fax Number: (412) 233-1011
E-mail Address: jsscheetz@uss.com

AGENCY ADDRESSES:

ACHD Contact:
Chief Engineer
Allegheny County Health Department
Air Quality Program
301 39th Street, Building #7
Pittsburgh, PA 15201-1811

EPA Contact:
Enforcement Programs Section (3AP12)
USEPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

II. FACILITY DESCRIPTION

FACILITY DESCRIPTION

U. S. Steel Mon Valley Works Clairton Plant is the largest by-products coke plant in North America. The Clairton Plant operates 10 coke batteries and produces approximately 13,000 tons of coke per day from the destructive distillation (carbonization) of more than 18,000 tons of coal. During the carbonization process, approximately 225 million cubic feet of coke oven gas are produced. The volatile products of coal contained in the coke oven gas are recovered in the by-products plant. In addition to the coke oven gas, daily production of these by-products include 145,000 gallons of crude coal tar, 55,000 gallons of light oil, 35 tons of elemental sulfur, and 50 tons of anhydrous ammonia. The coke produced is used in the blast furnace operations in the production of molten iron for steel making.

INSTALLATION DESCRIPTION

A new C Battery will replace existing Batteries 7 – 9. The new battery will contain the latest emission control technology and will emit less air pollution per ton of coke produced than the old batteries. C Battery will have 84 ovens (6 meters in height x 18 inches wide x 16.7 meters in length) that will have the capacity to produce 1,107,384 tons of coke per year. Batteries 7 - 9 have a total of 192 ovens with a current production capacity of approximately 896,420 tons of coke per year. USS will install the PROven® system, developed by Uhde Corporation. The PROven system (Pressure Regulated Oven) regulates pressure within each oven chamber where the collector main operates under a negative pressure during coking in order to almost eliminate fugitive emissions from the ovens during charging and coking. C Battery will utilize existing coal unloading, handling and conveying equipment. Coke produced from C Battery will be sent to a new Coke Screening Station for rail car loading and offsite transport.

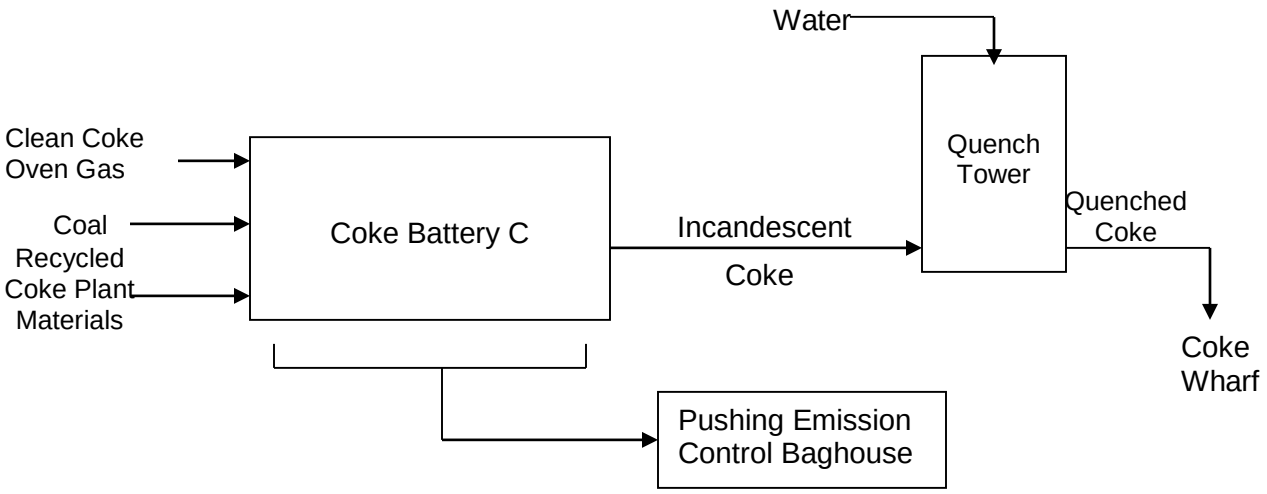
The Pushing Emission Control (PEC) system on C Battery will consist of a moveable hood with a stationary baghouse. The moveable hood is integral to the door machine, thus reducing pushing fugitive emissions. Therefore, whenever a door is opened, there will be a hood to capture emissions. The hood's capture efficiency is guaranteed at 90%, thus also reducing PEC fugitives. The PEC baghouse will have a particulate outlet loading of 0.005 grains per dry standard cubic foot (dscf).

As part of the C battery Replacement Project, the quench tower now serving Batteries 7 – 9 (Quench Tower 3) will be shut down along with B Battery auxiliary quench tower which will be demolished. A new quench tower (P047) will be installed for C Battery. This new quench tower will have an exit area of 1,406.1 ft^2 and will have a height of 164.2 feet above grade. It will be equipped with Kiro-Nathaus baffles which are more efficient at capturing the entrained water droplets than the baffles in the quench tower currently being used by Batteries 7 – 9. In addition to the new quench tower, the C battery will employ a new quench car to transport the coke from C battery to the new quench tower. The existing B Battery quench tower will serve as the auxiliary tower for quenching the coke from C Battery.

Installation Emission Unit Summary:

I.D.	SOURCE DESCRIPTION	CONTROL DEVICE(S)	MAXIMUM CAPACITY	FUEL/RAW MATERIAL	STACK I.D.
P046	Coke Oven Battery C	PROven® system Pushing Emission Control System Baghouse	1,379,059 tons of coal charged per year	Coal, supplemented with recycled coke plant materials such as tar decanter sludge, bio sludge, and coke oven gas pipeline material, synfuel, metallurgical coke, petroleum coke, coke breeze, synfuel additive, and bulk density control additives; Coke Oven Gas	S046 (Combust-ion Stack) S047 (PEC Baghouse Stack)
P047	C Battery Quench Tower	Kiro-Nathaus Baffles (2 sets)	1,379,059 tons of coal per year	Water and Incandescent Coke	S048

COKE BATTERY C PROCESS FLOW DIAGRAM



DECLARATION OF POLICY

Pollution prevention is recognized as the preferred strategy (over pollution control) for reducing risk to air resources. Accordingly, pollution prevention measures should be integrated into air pollution control programs wherever possible, and the adoption by sources of cost-effective compliance strategies, incorporating pollution prevention, is encouraged. The Department will give expedited consideration to any permit modification request based on pollution prevention principles.

The permittee is subject to the terms and conditions set forth below. These terms and conditions constitute provisions of *Allegheny County Health Department Rules and Regulations, Article XXI Air Pollution Control*. The subject equipment has been conditionally approved for operation. The equipment shall be operated in conformity with the plans, specifications, conditions, and instructions which are part of your application, and may be periodically inspected for compliance by the Department. In the event that the terms and conditions of this permit or the applicable provisions of Article XXI conflict with the application for this permit, these terms and conditions and the applicable provisions of Article XXI shall prevail. Additionally, nothing in this permit relieves the permittee from the obligation to comply with all applicable Federal, State and Local laws and regulations.

III. GENERAL CONDITIONS

1. Prohibition of Air Pollution (§2101.11)

It shall be a violation of this permit to fail to comply with, or to cause or assist in the violation of, any requirement of this permit, or any order or permit issued pursuant to authority granted by Article XXI. The permittee shall not willfully, negligently, or through the failure to provide and operate necessary control equipment or to take necessary precautions, operate any source of air contaminants in such manner that emissions from such source:

a. Exceed the amounts permitted by this permit or by any order or permit issued pursuant to Article XXI;
b. Cause an exceedance of the ambient air quality standards established by Article XXI §2101.10; or
c. May reasonably be anticipated to endanger the public health, safety, or welfare.

2. Nuisances (§2101.13)

Any violation of any requirement of this Permit shall constitute a nuisance.

3. Definitions (§2101.20)

a. Except as specifically provided in this permit, terms used retain the meaning accorded them under the applicable provisions and requirements of Article XXI or the applicable federal or state regulation. Whenever used in this permit, or in any action taken pursuant to this permit, the words and phrases shall have the meanings stated, unless the context clearly indicates otherwise.

b. Unless specified otherwise in this permit or in the applicable regulation, the term "*year*" shall mean any twelve (12) consecutive months.

c. The definitions in §40 CFR 63, Subpart L at §63.301 and Subpart CCCCC at §63.7352 are incorporated by reference.

d. Unless specified otherwise in this permit or in the applicable regulation, the term "SIP" shall mean the Allegheny County Portion of the Pennsylvania State Implementation Plan, Attainment Demonstration for the Allegheny, PA SO_2 Nonattainment Area 2010 Standards as adopted by the Allegheny County Board of Health on July 12, 2017.

4. Certification (§2102.01)

Any report or compliance certification submitted under this permit shall contain written certification by a responsible official as to truth, accuracy, and completeness. This certification and any other certification required under this permit shall be signed by a responsible official of the source, and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or Article XXI, and all equivalent compliance techniques that have been approved by the Department, shall be properly installed, maintained, and operated consistent with good air pollution control practice.

6. Conditions (§2102.03.c)

It shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02, for any person to fail to comply with any terms or conditions set forth in this permit.

7. Transfers (§2102.03.e)

This permit shall not be transferable from one person to another, except in accordance with Article XXI §2102.03.e and in cases of change-in-ownership which are documented to the satisfaction of the Department, and shall be valid only for the specific sources and equipment for which this permit was issued. The transfer of permits in the case of change-in-ownership may be made consistent with the administrative permit amendment procedure of Article XXI §2103.14.b.

8. Effect (§2102.03.g)

Issuance of this permit shall not in any manner relieve any person of the duty to fully comply with the requirements of Article XXI or any other provision of law, nor shall it in any manner preclude or affect the right of the Department to initiate any enforcement action whatsoever for violations of Article XXI or this Permit, whether occurring before or after the issuance of such permit. Further, the issuance of this permit shall not be a defense to any nuisance action, nor shall such permit be construed as a certificate of compliance with the requirements of Article XXI or this Permit.

9. General Requirements (§2102.04.a)

It shall be a violation of this Permit giving rise to the remedies set forth in Article XXI §2109 for any person to install, modify, replace, reconstruct, or reactivate any source or air pollution control equipment to which this Permit applies unless either:

a. The Department has first issued an Installation Permit for such source or equipment; or

b. Such action is solely a reactivation of a source with a current Operating Permit, which is approved under §2103.13 of Article XXI.

10. Conditions (§2102.04.e)

Further, the initiation of installation, modification, replacement, reconstruction, or reactivation under this Installation Permit and any reactivation plan shall be deemed acceptance by the source of all terms and conditions specified by the Department in this permit and plan.

11. Revocation (§2102.04.f)

a. The Department may, at any time, revoke this Installation Permit if it finds that:
   1) Any statement made in the permit application is not true, or that material information has not been disclosed in the application;
   2) The source is not being installed, modified, replaced, reconstructed, or reactivated in the manner indicated by this permit or applicable reactivation plan;
   3) Air contaminants will not be controlled to the degree indicated by this permit;
   4) Any term or condition of this permit has not been complied with;
   5) The Department has been denied lawful access to the premises or records, charts, instruments and the like as authorized by this Permit; or

b. Prior to the date on which construction of the proposed source has commenced the Department may, revoke this Installation Permit if a significantly better air pollution control technology has become available for such source, a more stringent regulation applicable to such source has been adopted, or any other change has occurred which requires a more stringent degree of control of air contaminants.

12. Term (§2102.04.g)

This Installation Permit shall expire in 18 months if construction has not commenced within such period or shall expire 18 months after such construction has been suspended, if construction is not resumed within such period. In any event, this Installation Permit shall expire upon completion of construction, except that this Installation Permit shall authorize temporary operation to facilitate shakedown of sources and air cleaning devices, to permit operations pending issuance of a related subsequent Operating Permit, or to permit the evaluation of the air contamination aspects of the source. Such temporary operation period shall be valid for a limited time, not to exceed 180 days, but may be extended for additional limited periods, each not to exceed 120 days, except that no temporary operation shall be authorized or extended which may circumvent the requirements of this Permit.

13. Annual Installation Permit Administrative Fee (§2102.10.c & e)

No later than 30 days after the date of issuance of this Installation Permit and on or before the last day of the month in which this permit was issued in each year thereafter, during the term of this permit until a subsequent corresponding Operating Permit or amended Operating Permit is properly applied for, the owner or operator of such source shall pay to the Department, in addition to all other applicable emission and administration fees, an Annual Installation Permit Administration Fee in an amount of $750.

14. Severability Requirement (§2103.12.l)

The provisions of this permit are severable, and if any provision of this permit is determined to by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

15. Reporting Requirements (§2103.12.k)

a. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the Responsible Official.

b. Prompt reporting of deviations from permit requirements is required, including those attributable to upset conditions as defined in this permit and Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

c. All reports submitted to the Department shall comply with the certification requirements of General Condition III.4 above.

d. Semiannual reports required by this permit shall be submitted to the Department as follows:

1) One semiannual report is due by July 31 of each year for the time period beginning January 1 and ending June 30.
2) One semiannual report is due by January 31 of each year for the time period beginning July 1 and ending December 31.
3) The first semiannual report shall be due January 31, 2009 for the time period beginning on the issuance date of this permit through December 31, 2008.

e. Quarterly reports required by this permit shall be submitted to the Department as follows:

1) The quarterly report for January through March shall be due on or before April 30 of each year. .
2) The quarterly report for April through June shall be due on or before July 31 of each year.
3) The quarterly report for July through September shall be due on or before October 31 of each year.
4) The quarterly report for October through December shall be due on or before January 31 of the following year. .
5) The first quarterly report shall be due January 31, 2009 for the time period beginning on the issuance date of this permit through December 31, 2008.

f. Reports may be emailed to the Department at aqreports@alleghenycounty.us in lieu of mailing a hard copy.

16. Minor Installation Permit Modifications (§2102.10.d)

Modifications to this Installation Permit may be applied for but only upon submission of an application with a fee in the amount of $300 and where:

a. No reassessment of any control technology determination is required; and
b. No reassessment of any ambient air quality impact is required.

17. Violations (§2104.06)

The violation of any emission standard established by this Permit shall be a violation of this Permit giving rise to the remedies provided by Article §2109.02.

18. Other Requirements Not Affected (§2105.02)

Compliance with the requirements of this permit shall not in any manner relieve any person from the duty to fully comply with any other applicable federal, state, or county statute, rule, regulation, or the like, including, but not limited to, any applicable NSPSs, NESHAPs, MACTs, or Generally Achievable Control Technology standards now or hereafter established by the EPA, and any applicable requirement of BACT or LAER as provided by Article XXI, any condition contained in this Installation Permit and/or any additional or more stringent requirements contained in an order issued to such person pursuant to Part I of Article XXI.

19. Other Rights and Remedies Preserved (§2109.02.b)

Nothing in this permit shall be construed as impairing any right or remedy now existing or hereafter created in equity, common law or statutory law with respect to air pollution, nor shall any court be deprived of such jurisdiction for the reason that such air pollution constitutes a violation of this permit

20. Penalties, Fines, and Interest (§2109.07.a)

A source that fails to pay any fee required under this Permit or article XXI when due shall pay a civil penalty of 50% of the fee amount, plus interest on the fee amount computed in accordance with of Article XXI §2109.06.a.4 from the date the fee was required to be paid. In addition, the source may have its permit revoked.

21. Appeals (§2109.10)

In accordance with State Law and County regulations and ordinances, any person aggrieved by an order or other final action of the Department issued pursuant to Article XXI shall have the right to appeal the action to the Director in accordance with the applicable County regulations and ordinances.

IV. SITE LEVEL TERMS AND CONDITIONS

1. Reporting of Upset Conditions (§2103.12.k.2)

The permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in Article XXI §2108.01.c, the probable cause of such deviations, and any corrective actions or preventive measures taken.

2. Visible Emissions (§2104.01.a)

a. Except as provided for by Article XXI §2108.01.d pertaining to a cold start, no person shall operate, or allow to be operated, any source in such manner that the opacity of visible emissions from a flue or process fugitive emissions from such source, excluding uncombined water:

1) Equal or exceed an opacity of 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or,
2) Equal or exceed an opacity of 60% at any time.

b. Condition IV.2.a above does not apply to coke ovens or coke oven batteries.

3. Odor Emissions (§2104.04) (County-only enforceable)

No person shall operate, or allow to be operated, any source in such manner that emissions of malodorous matter from such source are perceptible beyond the property line. The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to ensure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

4. Materials Handling (§2104.05)

The permittee shall not conduct, or allow to be conducted, any materials handling operation in such manner that emissions from such operation are visible at or beyond the property line.

5. Operation and Maintenance (§2105.03)

All air pollution control equipment required by this permit or any order under Article XXI, and all equivalent compliance techniques approved by the Department, shall be properly installed, maintained, and operated consistently with good air pollution control practice.

6. Open Burning (§2105.50)

No person shall conduct, or allow to be conducted, the open burning of any material, except where the Department has issued an Open Burning Permit to such person in accordance with Article XXI §2105.50 or where the open burning is conducted solely for the purpose of non-commercial preparation of food for human consumption, recreation, light, ornament, or provision of warmth for outside workers, and in a manner which contributes a negligible amount of air contaminants.

7. Shutdown of Control Equipment (§2108.01.b)

a. In the event any air pollution control equipment is shut down for reasons other than a breakdown, the person responsible for such equipment shall report, in writing, to the Department the intent to shut down such equipment at least 24 hours prior to the planned shutdown. Notwithstanding the submission of such report, the equipment shall not be shut down until the approval of the Department is obtained; provided, however, that no such report shall be required if the source(s) served by such air pollution control equipment is also shut down at all times that such equipment is shut down.

b. The Department shall act on all requested shutdowns as promptly as possible. If the Department does not take action on such requests within ten (10) calendar days of receipt of the notice, the request shall be deemed denied, and upon request, the owner or operator of the affected source shall have a right to appeal in accordance with the provisions of Article XI.

c. The prior report required by Site Level Condition IV.7.a above shall include:

1) Identification of the specific equipment to be shut down, its location and permit number (if permitted), together with an identification of the source(s) affected;
2) The reasons for the shutdown;
3) The expected length of time that the equipment will be out of service;
4) Identification of the nature and quantity of emissions likely to occur during the shutdown;
5) Measures, including extra labor and equipment, which will be taken to minimize the length of the shutdown, the amount of air contaminants emitted, or the ambient effects of the emissions;
6) Measures which will be taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impracticable to shut down or curtail the affected source(s) during the shutdown; and
7) Such other information as may be required by the Department.

8. Breakdowns (§2108.01.c)

a. In the event that any air pollution control equipment, process equipment, or other source of air contaminants breaks down in such manner as to have a substantial likelihood of causing the emission of air contaminants in violation of this permit, or of causing the emission into the open air of potentially toxic or hazardous materials, the person responsible for such equipment or source shall immediately, but in no event later than sixty (60) minutes after the commencement of the breakdown, notify the Department of such breakdown and shall, as expeditiously as possible but in no event later than seven (7) days after the original notification, provide written notice to the Department.

b. To the maximum extent possible, all oral and written notices required shall include all pertinent facts, including:

1) Identification of the specific equipment which has broken down, its location and permit number (if permitted), together with an identification of all related devices, equipment, and other sources which will be affected.
2) The nature and probable cause of the breakdown.
3) The expected length of time that the equipment will be inoperable or that the emissions will continue.

4) Identification of the specific material(s) which are being, or are likely to be emitted, together with a statement concerning its toxic qualities, including its qualities as an irritant, and its potential for causing illness, disability, or mortality.
5) The estimated quantity of each material being or likely to be emitted.
6) Measures, including extra labor and equipment, taken or to be taken to minimize the length of the breakdown, the amount of air contaminants emitted, or the ambient effects of the emissions, together with an implementation schedule.
7) Measures being taken to shut down or curtail the affected source(s) or the reasons why it is impossible or impractical to shut down the source(s), or any part thereof, during the breakdown.

c. Notices required shall be updated, in writing, as needed to advise the Department of changes in the information contained therein. In addition, any changes concerning potentially toxic or hazardous emissions shall be reported immediately. All additional information requested by the Department shall be submitted as expeditiously as practicable.

d. Unless otherwise directed by the Department, the Department shall be notified whenever the condition causing the breakdown is corrected or the equipment or other source is placed back in operation by no later than 9:00 AM on the next County business day. Within seven (7) days thereafter, written notice shall be submitted pursuant to Paragraphs a and b above.

e. Breakdown reporting shall not apply to breakdowns of air pollution control equipment which occur during the initial startup of said equipment, provided that emissions resulting from the breakdown are of the same nature and quantity as the emissions occurring prior to startup of the air pollution control equipment.

f. In no case shall the reporting of a breakdown prevent prosecution for any violation of this permit or Article XXI.

9. Cold Start (§2108.01.d)

In the event of a cold start on any fuel-burning or combustion equipment, except stationary internal combustion engines and combustion turbines used by utilities to meet peak load demands, the person responsible for such equipment shall report in writing to the Department the intent to perform such cold start at least 24 hours prior to the planned cold start. Such report shall identify the equipment and fuel(s) involved and shall include the expected time and duration of the startup. Upon written application from the person responsible for fuel-burning or combustion equipment which is routinely used to meet peak load demands and which is shown by experience not to be excessively emissive during a cold start, the Department may waive these requirements and may instead require periodic reports listing all cold starts which occurred during the report period. The Department shall make such waiver in writing, specifying such terms and conditions as are appropriate to achieve the purposes of Article XXI. Such waiver may be terminated by the Department at any time by written notice to the applicant.

10. Monitoring of Malodorous Matter Beyond Facility Boundaries (§2104.04)

The permittee shall take all reasonable action as may be necessary to prevent malodorous matter from becoming perceptible beyond facility boundaries. Further, the permittee shall perform such observations as may be deemed necessary along facility boundaries to insure that malodorous matter beyond the facility boundary in accordance with Article XXI §2107.13 is not perceptible and record all findings and corrective action measures taken.

11. Emissions Inventory Statements (§2108.01.e & g)

a. Emissions inventory statements in accordance with §2108.01.e shall be submitted to the Department by March 15 of each year for the preceding calendar year. The Department may require more frequent submittals if the Department determines that more frequent submissions are required by the EPA or that analysis of the data on a more frequent basis is necessary to implement the requirements of Article XXI or the Clean Air Act.

b. The failure to submit any report or update within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

12. Orders (§2108.01.f)

In addition to meeting the requirements Site Level Conditions IV.7 through IV.11, inclusive, the person responsible for any source shall, upon order by the Department, report to the Department such information as the Department may require in order to assess the actual and potential contribution of the source to air quality. The order shall specify a reasonable time in which to make such a report.

13. Violations (§2108.01.g)

The failure to submit any report or update thereof required by Site Level Conditions IV.7 through IV.12 above, inclusive, within the time specified, the knowing submission of false information, or the willful failure to submit a complete report shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

14. Emissions Testing (§2108.02)

a. **Orders**: No later than 60 days after achieving full production or 120 days after startup, whichever is earlier, the permittee shall conduct, or cause to be conducted, such emissions tests as are specified by the Department to demonstrate compliance with the applicable requirements of this permit and shall submit the results of such tests to the Department in writing. Upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time for conducting such tests beyond 120 days after startup but shall not extend the time beyond 60 days after achieving full production. Emissions testing shall comply with all applicable requirements of Article XXI, §2108.02.e.

b. **Tests by the Department**: Notwithstanding any tests conducted pursuant to this permit, the Department or another entity designated by the Department may conduct emissions testing on any source or air pollution control equipment. At the request of the Department, the permittee shall provide adequate sampling ports, safe sampling platforms and adequate utilities for the performance of such tests.

c. **Testing Requirements:** No later than 45 days prior to conducting any tests required by this permit, the person responsible for the affected source shall submit for the Department's approval a written test protocol explaining the intended testing plan, including any deviations from standard testing procedures, the proposed operating conditions of the source during the test, calibration data for specific test equipment and a demonstration that the tests will be conducted under the direct supervision of persons qualified by training and experience satisfactory to the Department to conduct such tests. In addition, at least 30 days prior to conducting such tests, the person responsible

shall notify the Department in writing of the time(s) and date(s) on which the tests will be conducted and shall allow Department personnel to observe such tests, record data, provide pre-weighed filters, analyze samples in a County laboratory and to take samples for independent analysis. Test results shall be comprehensively and accurately reported in the units of measurement specified by the applicable emission limitations of this permit.

d. Test methods and procedures shall conform to the applicable reference method set forth in this permit or Article XXI Part G, or where those methods are not applicable, to an alternative sampling and testing procedure approved by the Department consistent with Article XXI §2108.02.e.2.

e. **Violations**: The failure to perform tests as required by this permit or an order of the Department, the failure to submit test results within the time specified, the knowing submission of false information, the willful failure to submit complete results, or the refusal to allow the Department, upon presentation of a search warrant, to conduct tests, shall be a violation of this permit giving rise to the remedies provided by Article XXI §2109.02.

15. Abrasive Blasting (§2105.51)

a. Except where such blasting is a part of a process requiring an operating permit , no person shall conduct or allow to be conducted, abrasive blasting or power tool cleaning of any surface, structure, or part thereof, which has a total area greater than 1,000 square feet unless such abrasive blasting complies with all applicable requirements of Article XXI §2105.51.

b. In addition to complying with all applicable provisions of §2105.51, no person shall conduct, or allow to be conducted, abrasive blasting of any surface unless such abrasive blasting also complies with all other applicable requirements of Article XXI unless such requirements are specifically addressed by §2105.51.

16. Asbestos Abatement (§2105.62, §2105.63)

In the event of removal, encasement, or encapsulation of Asbestos-Containing Material (ACM) at a facility or in the event of the demolition of any facility, the permittee shall comply with all applicable provisions of Article XXI §2105.62 and §2105.63.

17. Permit Source Premises (§2105.40)

a. **General.** No person shall operate, or allow to be operated, any source for which a permit is required by Article XXI Part C in such manner that emissions from any open land, roadway, haul road, yard, or other premises located upon the source or from any material being transported within such source or from any source-owned access road, haul road, or parking lot over five (5) parking spaces:

1) Are visible at or beyond the property line of such source;

2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or

3) Have an opacity of 60% or more at any time.

b. **Deposition on Other Premises.** Visible emissions from any solid or liquid material that has been deposited by any means from a source onto any other premises shall be considered emissions from

such source within the meaning of Site Level Condition IV.17.a above.

18. Parking Lots and Roadways (§2105.42)

a. The permittee shall not maintain for use, or allow to be used, any parking lot over 50 parking spaces or used by more than 50 vehicles in any day or any other roadway carrying more than 100 vehicles in any day or 15 vehicles in any hour in such manner that emissions from such parking lot or roadway:

1) Are visible at or beyond the property line;

2) Have an opacity of 20% or more for a period or periods aggregating more than three (3) minutes in any 60 minute period; or

3) Have an opacity of 60% or more at any time.

b. Visible emissions from any solid or liquid material that has been deposited by any means from a parking lot or roadway onto any other premises shall be considered emissions from such parking lot or roadway.

c. Site Level Condition IV.18.a above shall apply during any repairs or maintenance done to such parking lot or roadway.

d. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.18 may be enforced by any municipal or local government unit having jurisdiction over the place where such parking lots or roadways are located. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.18.

19. Permit Source Transport (§2105.43)

a. No person shall transport, or allow to be transported, any solid or liquid material outside the boundary line of any source for which a permit is required by Article XXI Part C in such manner that there is any visible emission, leak, spill, or other escape of such material during transport.

b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.19 may be enforced by any municipal or local government unit having jurisdiction over the place where such visible emission, leak, spill, or other escape of material during transport occurs. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violation of Site Level Condition IV.19.

20. Construction and Land Clearing (§2105.45)

a. No person shall conduct, or allow to be conducted, any construction or land clearing activities in such manner that the opacity of emissions from such activities:

1) Equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any sixty (60) minute period; or
2) Equal or exceed 60% at any time.

b. Notwithstanding any other provision of this permit, the prohibitions of Site Level Condition IV.20 may be enforced by any municipal or local government unit having jurisdiction over the place where such construction or land clearing activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.20.

21. Demolition (§2105.47)

a. No person shall conduct, or allow to be conducted, any demolition activities in such manner that the opacity of the emissions from such activities equal or exceed 20% for a period or periods aggregating more than three (3) minutes in any 60 minute period.

b. Notwithstanding any other provisions of this permit, the prohibitions of Site Level Condition IV.21 may be enforced by any municipal or local government unit having jurisdiction over the place where such demolition activities occur. Such enforcement shall be in accordance with the laws governing such municipal or local government unit. In addition, the Department may pursue the remedies provided by Article XXI §2109.02 for any violations of Site Level Condition IV.21.

22. Fugitive Emissions (§2105.49)

The person responsible for a source of fugitive emissions, in addition to complying with all other applicable provisions of this permit shall take all reasonable actions to prevent fugitive air contaminants from becoming airborne. Such actions may include, but are not limited to:

a. The use of asphalt, oil, water, or suitable chemicals for dust control;
b. The paving and maintenance of roadways, parking lots and the like;
c. The prompt removal of earth or other material which has been deposited by leaks from transport, erosion or other means;
d. The adoption of work or other practices to minimize emissions;
e. Enclosure of the source; and
f. The proper hooding, venting, and collection of fugitive emissions.

23. Episode Plans (§2106.02)

The permittee shall upon written request of the Department, submit a source curtailment plan, consistent with good industrial practice and safe operating procedures, designed to reduce emissions of air contaminants during air pollution episodes. Such plans shall meet the requirements of Article XXI §2106.02.

24. New Source Performance Standards (§2105.05)

a. It shall be a violation of this permit giving rise to the remedies provided by §2109.02 of Article XXI for any person to operate, or allow to be operated, any source in a manner that does not comply with all requirements of any applicable NSPS now or hereafter established by the EPA, except if such person has obtained from EPA a waiver pursuant to Section 111 or Section 129 of the Clean Air Act or is otherwise lawfully temporarily relieved of the duty to comply with such requirements.

b. Any person who operates, or allows to be operated, any source subject to any NSPS shall conduct, or cause to be conducted, such tests, measurements, monitoring and the like as is required by such

standard. All notices, reports, test results and the like as are required by such standard shall be submitted to the Department in the manner and time specified by such standard. All information, data and the like which is required to be maintained by such standard shall be made available to the Department upon request for inspection and copying.

25. NOx Budget Trading Program

The requirements of PA Code Title 25 Chapter 145 are hereby incorporated by reference.

26. Facility-wide Emission Limitations

a. During the initial heat-up stage of C Battery by use of external burners and the subsequent heat-up stage by use of the battery underfiring and reversing system, the permittee shall install, operate and maintain these burner systems according to good combustion and air pollution control practices, at all times. [§2102.04.b.6]

b. Prior to charging coal to the C Battery coke ovens, the permittee shall permanently shutdown Coke Oven Battery No.9. During start-up of C Battery, operation of Batteries 7 and 8 shall be limited to pushing 120 ovens/day. [§2102.04.b.6]

c. The permittee shall not combust coke oven gas, or allow such gas to be combusted during the C Battery heat-up stage and during the C Battery coke production ramp-up stage, unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 40 grains per hundred dry standard cubic feet of coke oven gas. The concentration of sulfur compounds shall include tail-gas sulfur, measured as hydrogen sulfide, emitted from sulfur removal equipment. [§2105.21.h.4]

d. During the C Battery coke production ramp-up stage, the PROven® System, Pushing Emission Control (PEC) Systems, stage charging of coal to the ovens and other control measures to limit pollutant emissions shall be installed and operating according to good air pollution control practices. [§2102.04.b.6]

e. On or before 90 days after charging coal into the first oven of C Battery or upon achieving a coking time of 18 hours in C Battery, whichever occurs first, the permittee shall permanently shutdown Coke Oven Battery No. 7 and Coke Oven Battery No. 8. However, upon written application setting forth all information necessary to evaluate the application, the Department may, for good cause shown, extend the time period provided above, but in no case shall the total time period exceed 180-days after coal is first charged into the first oven of C Battery. [§2102.04.b.6]

f. Until terminated, the following Consent Decree and Consent Orders and Agreements, are hereby incorporated by reference into this permit:

1) Second Consent Decree, Civil Actions Nos. 79-709, 91-329, December 11, 1992. This decree establishes compliance requirements for Batteries 1, 2, 3, 7, 8, 9, 13, 14, 15, 19, 20 and B. The decree includes requirements for charging, door areas, charging ports and charging port seals, offtake piping, pushing, combustion stacks, quenching, and coke oven gas desulfurization.

2) *Consent Judgment, County of Allegheny v United States Steel Corporation, GD-16-004611, March 24, 2016.* The Consent Judgment includes compliance obligations regarding Clairton coke oven batteries.

27. SO_2 Compliance Monitoring

a. The permittee shall not operate, or allow to be operated, any source in such manner that unburned coke oven gas is emitted into the open air. In addition, the permittee shall not flare, mix, or combust coke oven gas, or allow such gas to be flared, mixed or combusted unless the concentration of sulfur compounds, measured as hydrogen sulfide, in such gas is less than or equal to 35 grains per hundred dry standard cubic feet of coke oven gas produced by Clairton Plant, when all sulfur emissions from the Claus Sulfur Recovery Plant and the tail gas cleaning equipment thereon, expressed as equivalent H_2S are added to the measured H_2S. The concentration of sulfur compounds specified shall include the tail-gas sulfur, measured as hydrogen sulfide, emitted from sulfur removal equipment. [§2105.21.h; §2105.21.h.4].

b. For the source listed in Section V-A-1, Table 1-A, the permittee shall determine the H_2S grain loading and flow rate of the fuel as combusted. The permittee shall record the output of each system for measuring sulfur dioxide emissions discharged to the atmosphere.

V. EMISSION UNIT LEVEL TERMS AND CONDITIONS

A. Process P001: Coke Oven Battery C

Process Description:	Coke Battery C
Facility ID:	P046
Max. Design Rate/Units:	1,379,059 tons of coal charged /year
Capacity:	1,107,384 tons of coke/year
Raw Materials:	coal, coke oven gas, recycled coke plant materials
Control Device(s):	PROven® system, Pushing Emission Control Baghouse

The permittee is also subject to the following conditions:

1. Restrictions

a. The permittee shall not operate C Battery coke ovens unless the PROven® System is installed and operating in such manner that the collector main is maintained at a negative pressure and each individual oven is maintained at the lowest positive pressure necessary to inhibit leaks of raw coke oven gas to the atmosphere from oven doors, charging port lids, and offtakes. [§2102.04.b.6]

b. The permittee shall not operate, or allow to be operated C Battery coke ovens in such manner that the aggregate of visible charging emissions exceeds a total of 55 seconds during any five (5) consecutive charges on such battery. [§2105.21.a.1]

c. The permittee shall not operate, or allow to be operated, C Battery coke ovens in such manner, at any time, there are visible emissions from more than three percent (3%) of the door areas of the operating coke ovens in such battery, excluding the two door areas of the last oven charged and any door areas obstructed from view. [§2105.21.b.1]

d. The permittee shall not operate, or allow to be operated, C Battery coke ovens in such manner that emissions from the door areas of any coke oven exceed an opacity of 30% at any time 15 or more minutes after such oven has been charged. [§2105.21.b.4]

e. The permittee shall not operate, or allow to be operated C Battery coke ovens in such manner that, at any time, there are visible emissions from more than (0.6%) of the charging ports or charging port seals on the operating coke ovens of such battery. [§2105.21.c]

f. The permittee shall not operate, or allow to be operated, C Battery coke ovens in such manner that, at any time, there are visible emissions from more than three percent (3%) of the offtake piping on the operating coke ovens of such battery; [§2105.21.d]

g. The permittee shall not operate, or allow to be operated, C Battery coke ovens in such manner that, at any time, there are visible emissions from any open standpipe in excess of 10%. An exclusion from this opacity limit shall be allowed for 2 minutes immediately following the opening of the standpipe cap. [§2102.04.b.4]

h. The permittee shall not operate, or allow to be operated, Coke Oven Battery C unless there is installed on such battery a pushing emission control device which is designed to reduce fugitive emissions from pushing to the minimum attainable through the use of BACT, nor shall any person operate, or allow to be operated any battery of coke ovens in such manner that: [§2102.04.b.6;

2105.21.e]

1) Fugitive pushing emissions or emissions from the pushing emission control device outlet equal or exceed an opacity of 20% at any time; and [§2102.04.b.6; 2105.21.e.4]

2) Visible emissions from the transport of hot coke in the open atmosphere exceed ten percent (10%) opacity at any time. [§2102.04.b.6; 2105.21.e.5]

i. No person shall operate, or allow to be operated, Coke Oven Battery C in such manner that, at any time, emissions from the combustion stack serving such battery: [§2102.04.b.6; 2105.21.f]

1) Exceed a particulate concentration of 0.010 grains per dry standard cubic foot; [§2102.04.b.6]
2) Equal or exceed an opacity of 20% for a period or periods aggregating in excess of three (3) minutes in any 60 minute period; or [§2102.04.b.6; 2105.21.f.3]
3) Equal or exceed an opacity of 60% at any time. [§2102.04.b.6; 2105.21.f.4]
4) Measurements of opacity shall be performed according to the methods for visible emissions established by §2107.11 of Article XXI

j. The provisions of 40 CFR 63, Subpart L apply to Coke Battery C. [§2102.04.b.6; §63.300(c)]

k. The emission limitations set forth in 40 CFR 63, Subpart L shall apply at all times except during a period of startup, shutdown, or malfunction. The startup period shall be determined by the Department and shall not exceed 180 days. [§2102.04.b.6; 63.300(e)]

l. Rules of general applicability promulgated under section 112 of the Act, including the General Provisions, may apply to coke ovens provided that the topic covered by such a rule is not addressed in 40 CFR 63, Subpart L. [§2102.04.b.6; 63.300(f)]

m. The permittee shall not cause to be discharged or allow to be discharged to the atmosphere coke oven emissions from C Battery that exceed any of the following emission limitations: [§2102.04.b.6; 63.304(b)(4)]

1) 2.0 percent leaking coke oven doors as determined by the procedures in Condition V.A.2.c.1) below {§63.309(d)(1)}; [§2102.04.b.6]
2) 0.15 percent leaking topside port lids, as determined by the procedures in Condition V.A.2.c.1) below {§63.309(d)(1)}; [§63.304(b)(4)(ii), §2102.04.b.6]
3) 1.5 percent leaking offtake system(s), as determined by the procedures in Condition V.A.2.c.1) below {§63.309(d)(1)}; and [§2102.04.b.6]
4) 12 seconds of visible emissions per charge, as determined by the procedures in Condition V.A.2.c.2) below {§63.309(d)(2)}. [§63.304(b)(4)(iv)]

n. The permittee shall: [§2102.04.b.6; 63.307(a)]

1) Install a bypass/bleeder stack flare system that is capable of controlling 120 percent of the normal gas flow generated by Coke Oven Battery C, which shall thereafter be operated and maintained.

2) Not allow coke oven emissions to be vented to the atmosphere through bypass/bleeder stacks, except through the flare system or the alternative control device as described in V.A.1.q below{paragraph (d)}.

3) Install such a flare system before startup, and shall properly operate and maintain the flare system.

o. Each flare installed shall meet the following requirements: [§2102.04.b.6; 63.307(b)]

1) Each flare shall be designed for a net heating value of 8.9 MJ/scm (240 Btu/scf) if a flare is steam-assisted or air-assisted, or a net value of 7.45 MJ/scm (200 Btu/scf) if the flare is non-assisted.

2) Each flare shall have either a continuously operable pilot flame or an electronic igniter that meets the requirements of Conditions V.A.1.o.3) and V.A.1.o.4) below {paragraphs (b)(3) and (b)(4)}.

3) Each electronic igniter shall meet the following requirements:

i. Each flare shall be equipped with at least two igniter plugs with redundant igniter transformers;
ii. The ignition units shall be designed failsafe with respect to flame detection thermocouples (i.e., any flame detection thermocouples are used only to indicate the presence of a flame, are not interlocked with the ignition unit, and cannot deactivate the ignition system); and
iii. Integral battery backup shall be provided to maintain active ignition operation for a minimum of 15 minutes during a power failure.
iv. Each electronic igniter shall be operated to initiate ignition when the bleeder valve is not fully closed as indicated by an "OPEN" limit switch.

4) Each flare installed to meet the requirements of Condition V.A.1.o above {paragraph (b)} that does not have an electronic igniter shall be operated with a pilot flame present at all times as determined by V.A.2.g.2) below [§2102.04.b.6; 63.309(h)(2)].

p. Each flare installed shall be operated with no visible emissions, as determined by the methods specified in V.A.2.g.1) below {§63.309(h)(1)}, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. [§2102.04.b.6; 63.307(c)]

q. As an alternative to the installation, operation, and maintenance of a flare system as required in Condition V.A.1.n above {63.307(a)}, the permittee may petition the Department for approval of an alternative control device or system that achieves at least 98 percent destruction or control of coke oven emissions vented to the alternative control device or system. [§2102.04.b.6; 63.307(d)]

r. At all times including periods of startup, shutdown, and malfunction, the owner or operator shall operate and maintain the coke oven battery and its pollution control equipment required under 40 CFR 63, Subpart L, in a manner consistent with good air pollution control practices for minimizing emissions to the levels required by any applicable performance standards under 40 CFR 63, Subpart L. Failure to adhere to the requirement of this paragraph shall not constitute a separate violation if a violation of an applicable performance or work practice standard has also occurred. [§2102.04.b.6; 63.310(a)]

s. Malfunctions shall be corrected as soon as practicable after their occurrence. [§2102.04.b.6; 63.310(c)]

t. Except as specified in §63.307(f), nothing in 40 CFR 63, Subpart L shall limit or affect any

authority or obligation of Federal, State, or local agencies to establish emission limitations or other requirements more stringent than those specified in 40 CFR 63, Subpart L. [§2102.04.b.6; 63.312(d)]

u. The permittee shall comply with each emission limitation, work practice standard, and operation and maintenance requirement in 40 CFR Part 63, Subpart CCCCC that applies to you upon initial startup. [§2102.04.b.6; 63.7283(c)]

v. The permittee shall meet the notification and schedule requirements in Conditions V.A.5.m through V.A.5.p below {§63.7340}. Several of these notifications must be submitted before the compliance date for Coke Battery C. [§2102.04.b.6; 63.7283(d)]

w. The permittee shall not discharge to the atmosphere emissions of particulate matter from a control device applied to pushing emissions that exceed 0.02 pound per ton (lb/ton) of coke as determined by the procedures provided in Conditions V.A.2.l and V.A.2.m below. [§2102.04.b.6 §63.7290(a); §63.7322]

x. The permittee shall [§2102.04.b.6; 63.7290(b)(3)]:

1) Maintain the daily average volumetric flow rate at the inlet of the PEC baghouse at or above the minimum level established during the initial performance test; or: [§2102.04.b.6; 63.7290(b)(3)]

2) Maintain the daily average fan motor amperes of the PEC system electric motor at or above the minimum level established during the initial performance test. [§2102.04.b.6; 63.7290(b)(3)(i)]

y. The permittee shall not discharge to the atmosphere any emissions from the C Battery stack that exhibit an opacity greater than the following applicable limits. [§2102.04.b.6; 63.7296]

1) Daily average of 15 percent opacity for a battery on a normal coking cycle.
2) Daily average of 20 percent opacity for a battery on battery-wide extended coking.

z. The permittee shall be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in 40 CFR Part 63, Subpart CCCCC at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2. [§2102.04.b.6; 63.7310(a)]

aa. During the period between the compliance date specified for Coke Battery C in Condition V.A.1.u above {§63.7283}and the date upon which continuous monitoring systems have been installed and certified and any applicable operating limits have been set, the permittee shall maintain a log detailing the operation and maintenance of the process and emissions control equipment. [§2102.04.b.6; 63.7310(b)]

bb. The permittee shall develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). [§2102.04.b.6; 63.7310(c)]

cc. For each work practice standard and operation and maintenance requirement that applies to the permittee, the permittee shall demonstrate initial compliance within 30 calendar days after the compliance date that is specified in Condition V.A.1.u above {§63.7283}. [§2102.04.b.6;

63.7320(c)]

dd. The permittee has demonstrated initial compliance with the particulate matter emissions limit for C Battery PEC if the concentration of particulate matter (gr/dscf)), measured in accordance with the performance test procedures in Condition V.A.2.m below , did not exceed 0.02 lbs per ton of coke as determined by the procedures provided in Conditions V.A.2.l and V.A.2.m below. [§63.7326(a)(1)(i); §63.7322; §63.7326(a)]

ee. For each capture system applied to pushing emissions, the permittee established an appropriate site-specific operating limit, and: [§2102.04.b.6; 63.7326(a)(4)]

a) If the permittee elects the operating limit in Condition V.A.1.x.1) above{§63.7290(b)(3)} for volumetric flow rate, you have a record of the total volumetric flow rate at the inlet of the control device measured during the performance test in accordance with Condition V.A.2.n.1) below {§63.7323(c)(1)}; or

b) If the permittee elect the operating limit in ConditionV.A.1.x.2) above {§63.7290(b)(3)(i)} for fan motor amperes, you have a record of the fan motor amperes during the performance test in accordance with Condition V.A.2.n.2) below{§63.7323(c)(2)}.

ff. For C Battery subject to the opacity limit for stacks in Condition V.A.1.y above {§63.7296(a)}, the permittee has demonstrated initial compliance if the daily average opacity, as measured according to the performance test procedures in Condition V.A.2.q below {§63.7324(b)}, is no more than 15 percent for a battery on a normal coking cycle or 20 percent for a battery on battery-wide extended coking. [§2102.04.b.6; 63.7326(b)]

gg. For each control device applied to pushing emissions and subject to the emission limit in Condition V.A.1.w above {§63.7290(a)}, the permittee shall demonstrate continuous compliance by meeting the following requirements: [63.7333(a)]

1) Maintaining emissions of particulate matter at or below the applicable limits in Condition V.A.1.w above {§63.7290(a)(1)}; and
2) Conducting subsequent performance tests to demonstrate continuous compliance no less frequently than twice during each term of your title V operating permit (at mid-term and renewal).

hh. Emissions from C Battery combustion stack and the Pushing Emission Control Baghouse stack shall not exceed the limitations in Tables 1and 2, respectively: [§2102.04.b.6; 2105.21.f; IP 0052-I017, Condition V.A.1.b]

Table 1 - C Battery Combustion Stack Emission Limitations

POLLUTANT	LBS/HR	TPY [1]
Particulate Matter	17.6	77.0
PM-10	17.2	75.4
PM-2.5	17.0	74.5
Nitrogen Oxides	139.22	609.80
Carbon Monoxide	100.22	438.98
Volatile Organic Compound	12.3	51.90
Total Reduced Sulfur	2.0	8.80
Benzene	1.0	4.38
HCl	5.0	22.0
Naphthalene	0.11	0.50

[1] A year is defined as any 12 consecutive months.

TABLE 1-A – SO_2 Emission Limitations for C Battery Combustion Stack

30 day rolling average limit (lb/hr)*	Supplementary 24-hr Limit* (lb/hr)	Tons/year**
32.03	40.83	140.29

* Limits are based on a rolling 30-day average of 24-hour (calendar day) averages, with an additional restriction of no more than 3 consecutive days above a supplementary 24-hour limit.

** Tons/year estimates are based on modeled critical emission values in the SO_2 SIP.

Table 2 -C Battery Pushing Emission Control (PEC) Baghouse Stack Emission Limitations

POLLUTANT	LBS/HR	TPY [1]
Particulate Matter	7.7	33.5
PM-10	3.4	14.9
PM-2.5	1.4	6.1
Nitrogen Oxides	3.6	15.9
Sulfur Oxides	8.7	37.9
Carbon Monoxide	8.7	38.2
Volatile Organic Compounds	0.3	1.2
Total Reduced Sulfur	0.3	1.3
Benzene	0.04	0.19
Cyanide Compounds	0.09	0.39

[1]A year is defined as any 12 consecutive months.

2. Testing Requirements:

a. Except as otherwise provided in 40 CFR 63 Subpart L, a daily performance test shall be conducted each day, 7 days per week for C Battery, the results of which shall be used in accordance with procedures specified in 40 CFR 63, Subpart L to determine compliance with each of the applicable visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations in 40 CFR 63, Subpart L. [§2102.04.b.6; 63.309(a)]

1) Each performance test is to be conducted according to the procedures and requirements in Condition V.A.2.a above and in Method 303 Appendix A to 40 CFR 63, Subpart L or Methods 9 and 22 in Appendix A to 40 CFR Part 60 (where applicable).
2) Each performance test is to be conducted by a certified observer.
3) The certified observer shall complete any reasonable safety training program offered by the owner or operator prior to conducting any performance test at a coke oven battery.
4) Except as otherwise provided in Condition V.A.2.a.5) {paragraph (a)(5)}, the permittee shall pay an inspection fee to the Department each calendar quarter to defray the costs of the daily performance tests required under Condition V.A.2.a above {paragraph (a)} .

i. The inspection fee shall be determined according to Equation 3 of 40 CFR Part 63 Subpart L:

$$F = H \times S \quad (Eq.\ 3)$$

Where:

F = Fees to be paid by owner or operator.

H = Total person hours for inspections: 4 hours for 1 coke oven battery, 6.25 hours for 2 coke oven batteries, 8.25 hours for 3 coke oven batteries. For more than 3 coke oven batteries, use these hours to calculate the appropriate estimate of person hours.

S = Current average hourly rate for private visible emission inspectors in the relevant market.

ii. The enforcement agency may revise the value for H in equation 3 within 3 years after October 27, 1993 to reflect the amount of time actually required to conduct the inspections required under paragraph (a) of this section.

iii. The owner or operator shall not be required to pay an inspection fee (or any part thereof) under Condition V.A.2.a.4) above {paragraph (a)(4)}, for any monitoring or inspection services required by Condition V.A.2.a above {paragraph (a)} that the owner or operator can demonstrate are covered by other fees collected by the enforcement agency.

iv. Upon request, the enforcement agency shall provide the owner or operator information concerning the inspection services covered by any other fees collected by the enforcement agency, and any information relied upon under Condition V.A.2.a.4)b) {paragraph (a)(4)(ii)}.

5) The EPA shall be the enforcement agency during any period of time that a delegation of enforcement authority is not in effect or a withdrawal of enforcement authority under §63.313 is in effect, and the Administrator is responsible for performing the inspections required by ConditionV.A.2.a above, pursuant to §63.313(c). [§2102.04.b.6; 63.309(a)(5)(i)]

6) Within thirty (30) days of receiving notification from the Administrator that the EPA is the enforcement agency for a coke oven battery, the owner or operator shall enter into a contract providing for the inspections and performance tests required under this section to be performed by a Method 303 certified observer. The inspections and performance tests will be conducted at the expense of the owner or operator, during the period that the EPA is the implementing agency. [§2102.04.b.6; 63.309(a)(5)(ii)]

b. The certified observer shall conduct each performance test according to the following requirements: [§2102.04.b.6; 63.309(c)]

1) The certified observer shall conduct one run each day to observe and record visible emissions from each coke oven door, topside port lid, and offtake system on C Battery. The certified observer also shall conduct five runs to observe and record the seconds of visible emissions per charge for five consecutive charges from C Battery. The observer may perform additional runs as needed to obtain and record a visible emissions value (or set of values) for an emission point that is valid under Method 303 in Appendix A to 40 CFR 63, Subpart L. Observations from fewer than five consecutive charges shall constitute a valid set of charging observations only in accordance with the procedures and conditions specified in sections 3.8 and 3.9 of Method 303 in Appendix A to 40 CFR 63, Subpart L. If a valid visible emissions value (or set of values) is not obtained for a performance test, there is no compliance determination for that day. Compliance determinations will resume on the next day that a valid visible emissions value (or set of values) is obtained.

2) After each performance test for a C Battery, the certified observer shall check and record the collecting main pressure according to the procedures in Section 6.3 of Method 303 in Appendix A to 40 CFR 63, Subpart L.

i. The permittee shall demonstrate pursuant to Method 303 in Appendix A to 40 CFR 63, Subpart L the accuracy of the pressure measurement device upon request of the certified observer;
ii. The permittee shall not adjust the pressure to a level below the range of normal operation during or prior to the inspection;

3) In no case shall the permittee knowingly block a coke oven door, or any portion of a door for the purpose of concealing emissions or preventing observations by the certified observer.

c. Using the observations obtained from each performance test, the Department shall compute and record, in accordance with the procedures and requirements of Method 303 in Appendix A to 40 CFR 63, Subpart L, for each day of operations on which a valid emissions value (or set of values) is obtained: [§2102.04.b.6; 63.309(d)]

1) The 30-run rolling average of the percent leaking coke oven doors, topside port lids, and offtake systems on C Battery, using the equations in Sections 4.5.3.2, 5.6.5.2, and 5.6.6.2 of Method 303 in Appendix A to 40 CFR 63, Subpart L;
2) For by-product coke oven battery charging operations, the logarithmic 30-day rolling average of the seconds of visible emissions per charge for C Battery, using the equation in section 3.9 of Method 303 in appendix A to 40 CFR 63, Subpart L;

d. The certified observer shall make available to the Department as well as to the permittee, a copy of the daily inspection results by the end of the day and shall make available the calculated rolling average for each emission point to the permittee as soon as practicable following each performance test. The information provided by the certified observer is not a compliance determination. For the purpose of notifying the permittee of the results obtained by a certified observer, the person does not have to be certified. [§2102.04.b.6; 63.309(e)]

e. Compliance with 40CFR Part 63 Subpart L shall not be determined more often than the schedule provided for performance tests under Condition V.A.2.a above. If additional valid emissions observations are obtained (or in the case of charging, valid sets of emission observations), the arithmetic average of all valid values (or valid sets of values) obtained during the day shall be used in any computations performed to determine compliance under Condition V.A.2.c above {paragraph (d)} or determinations under Conditions V.A.6.a through V.A.6.d below {§63.306}. [§2102.04.b.6; 63.309(f)]

f. Compliance with the work practice emission control plan requirements in Conditions V.A.6.a through V.A.6.d below {§63.306}; standards for bypass/bleeder stacks in Conditions V.A.1.n.1) through V.A.1.n.3) above {§63.307}; and standards for collecting mains in Conditions V.A.3.a below V.A.4.a below, and V.A.6.e below through V.A.6.f below, {§63.308} is to be determined by the Department based on review of records and inspections. [§2102.04.b.6; 63.309(g)]

g. For a flare installed to meet the requirements of Condition V.A.1.o above {§63.307(b)}: [§2102.04.b.6; 63.309(h)]

1) Compliance with the provisions in Condition V.A.1.p above {§63.307(c)} (visible emissions from flares) shall be determined using Method 22 in Appendix A to 40 CFR 63, Subpart L, with an observation period of 2 hours; and
2) Compliance with the provisions in ConditionV.A.1.o.4) above {§63.307(b)(4)} (flare pilot light) shall be determined using a thermocouple or any other equivalent device.

h. No observations obtained during any program for training or for certifying observers under 40 CFR 63, Subpart L shall be used to determine compliance with the requirements of this permit. [§2102.04.b.6; §63.309(i)]

i. The permittee shall conduct a performance test to demonstrate compliance with each limit in Condition V.A.1.w above {§63.7290(a)}for emissions of particulate matter from a control device applied to pushing emissions that applies to you within 180 calendar days after the compliance date that is specified in Condition V.A.1.u above {§63.7283}. [§2102.04.b.6; 63.7320(a)]

j. The permittee shall conduct performance tests to demonstrate compliance with each opacity limit in Condition V.A.1.y above {§63.7297(a)} for coke oven battery C stack by the compliance date that is specified in Condition V.A.1.u above {§63.7283}. [§2102.04.b.6; 63.7320(b)]

k. For each control device subject to an emission limit for particulate matter in Condition V.A.1.w above {§63.7290(a)}, the permittee shall conduct subsequent performance tests no less frequently than once every two years. [§2102.04.b.6; 2108.02.a. and §63.7321]

l. The permittee shall conduct each performance test that applies to Coke Oven Battery C according to the requirements in Condition V.A.2.m below {§63.7322(b)}. [§2102.04.b.6; 63.7322(a)]

m. To determine compliance with a process-weighted mass rate of particulate matter (lb/ton of coke) from a control device applied to pushing emissions, follow the test methods and procedures below: [§63.7322(b)]

1) Determine the concentration of particulate matter according to the following test methods in Appendix A to 40 CFR Part 60.
   a) Method 1 to select sampling port locations and the number of traverse points. Sampling sites must be located at the outlet of the control device and prior to any releases to the atmosphere.
   b) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.
   c) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
   d) Method 4 to determine the moisture content of the stack gas.
   e) Method 5 or 5D, as applicable, to determine the concentration of front half particulate matter in the stack gas.

2) During each particulate matter test run, sample only during periods of actual pushing when the capture system fan and control device are engaged. Collect a minimum sample volume of 30 dry standard cubic feet of gas during each test run. Three valid test runs are needed to comprise a performance test. Each run must start at the beginning of a push and finish at the end of a push (*i.e.*, sample for an integral number of pushes).

3) Determine the total combined weight in tons of coke pushed during the duration of each test run according to the procedures in your source test plan for calculating coke yield from the quantity of coal charged to an individual oven.

4) Compute the process-weighted mass emissions (E_p) for each test run using Equation 1 as follows:

$$E_p = \frac{C \times Q \times T}{P \times K} \qquad \text{(Eq. 1)}$$

Where:

E_p= Process weighted mass emissions of particulate matter, lb/ton;

C = Concentration of particulate matter, gr/dscf;

Q = Volumetric flow rate of stack gas, dscf/hr;

T = Total time during a run that a sample is withdrawn from the stack during pushing, hr;

P = Total amount of coke pushed during the test run, tons; and

K = Conversion factor, 7,000 gr/lb.

n. For a capture system applied to pushing emissions from Coke Oven Battery C, the permittee shall establish a site-specific operating limit according to one of the following procedures: [§2102.04.b.6; 63.7323(c)]

1) If you elect the operating limit in Condition V.A.1.x.1) above {§63.7290(b)(3)}for volumetric flow rate, measure and record the total volumetric flow rate at the inlet of the control device during each push sampled for each particulate matter test run. Your operating limit is the lowest volumetric flow rate recorded during any of the three runs that meet the emission limit.

2) If you elect the operating limit in Condition V.A.1.x.2) above {§63.7290(b)(3)(i)} for fan motor amperes, measure and record the fan motor amperes during each push sampled for each particulate matter test run. Your operating limit is the lowest fan motor amperes recorded during any of the three runs that meet the emission limit.

o. The permittee may change the operating limit for a capture system or mobile control device that captures emissions during pushing if you meet the following requirements: [§2102.04.b.6; 63.7323(e)]

1) Submit a written notification to the Department of your request to conduct a new performance test to revise the operating limit.
2) Conduct a performance test to demonstrate that emissions of particulate matter from the control device do not exceed the applicable limit in §63.7290(a).
3) Establish revised operating limits according to the applicable procedures in Condition V.A.2.n above.

p. The permittee shall conduct each performance test that applies to Coke Oven battery C according to the requirements in Condition V.A.2.q below {§63.7324(b)}. [§2102.04.b.6; 63.7324(a)]

q. To determine compliance with the daily average opacity limit for stacks of 15 percent for a by-product coke oven battery on a normal coking cycle or 20 percent for a by-product coke oven battery on battery-wide extended coking, follow the test methods and procedures in the following conditions: [§2102.04.b.6; 63.7324(b)]

1) Using the continuous opacity monitoring system (COMS) required in Condition V.A.3.e below {§63.7330(e)}, measure and record the opacity of emissions from C Battery stack for a 24-hour period.

2) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).
3) Compute and record the 24-hour (daily) average of the COMS data.

r. The permittee shall have particulate emissions (PM_{10} and $PM_{2.5}$) stack tests performed on the C Battery combustion stack according to Site Level ConditionIV.14 and at least once every two years thereafter to demonstrate compliance with the mass emission standards in Condition V.A.1.hh above. Particulate emission tests shall be conducted according to the methodology specified in 40 CFR 60, Appendix A or a methodology approved by the Department. The permittee shall submit a stack test protocol to the Department for approval at least 45 days prior to the test dates. During each stack test performed, simultaneous visible emission evaluations shall be conducted according to the methodology specified in 40 CFR 60, Appendix A, Method 9, except for the provisions of Section 2.5 of Method 9. [§2108.02.b & .e]

s. Emissions of SO_2 shall be determined by converting the H_2S grain loading of the fuel burned and the fuel flow rate, as required by Condition V.A.3.a, to pounds per hour to determine compliance with the emission limitations of Condition V.A.1.hh, Table 1-A above.

t. The emissions testing performed to satisfy the RATA requirements for NO_X continuous emission monitoring systems (CEMS) shall be used to satisfy the testing requirements in this Condition.[§2105.06.b.4.B.]

u. The permittee shall perform Relative Accuracy Test Audits (RATA) of the NO_X CEMS as specified in 25 PA Code §§139.101 - 139.111. [§2108.03]

v. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. (§2103.12.h.1)

3. Monitoring Requirements

a. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall continuously monitor and record the H_2S concentration (in grains(gr)/100 dscf) of the COG combusted and the fuel flow rate required in Site Level Condition IV.27.b. Continuously shall be defined as at least once every 15 minutes. [IP 0052-I017, Condition V.A.3.a; §2102.04.b.6; §2103.12.i]

b. The permittee shall inspect the Coke Battery C collecting main for leaks at least once daily according to the procedures in Method 303 in Appendix A to 40 CFR 63, Subpart L. [§2102.04.b.6; 63.308(a)]

c. For each baghouse applied to pushing emissions from C Battery, the permittee shall at all times monitor the relative change in particulate matter loadings using a bag leak detection system according to the requirements in Condition V.A.3.f below {§63.7331(a)} and conduct inspections at their specified frequency according to the following requirements: [§2102.04.b.6; 63.7330(a)]

1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual;
2) Confirm that dust is being removed from hoppers through weekly visual inspections or equivalent means of ensuring the proper functioning of removal mechanisms;

3) Check the compressed air supply for pulse-jet baghouses each day;
4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology;
5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;
6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or laying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices;
7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks; and
8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

d. For each capture system applied to pushing emissions, the permittee shall at all times monitor the volumetric flow rate according to the requirements in Condition V.A.3.h below {§63.7331(g)}, or the fan motor amperes according to the requirements in Condition V.A.3.i below {§63.7331(h)}{§63.7331(i)}. [§2102.04.b.6; 63.7330(d)]

e. The permittee shall monitor at all times the opacity of emissions exiting the combustion stack using a COMS according to the requirements in Condition V.A.3.l below {§63.7331(j)}. [§2102.04.b.6; 63.7330(e)]

f. For each baghouse applied to pushing emissions, the permittee shall install, operate, and maintain each bag leak detection system according to the following requirements: [§2102.04.b.6; 63.7331(a)]

1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less;
2) The system must provide output of relative changes in particulate matter loadings;
3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over a preset level. The alarm must be located such that it can be heard by the appropriate plant personnel;
4) Each system that works based on the triboelectric effect must be installed, operated, and maintained in a manner consistent with the guidance document, “Fabric Filter Bag Leak Detection Guidance” (EPA–454/R–98–015, September 1997). The permittee may install, operate, and maintain other types of bag leak detection systems in a manner consistent with the manufacturer's written specifications and recommendations;
5) To make the initial adjustment of the system, establish the baseline output by adjusting the sensitivity (range) and the averaging period of the device. Then, establish the alarm set points and the alarm delay time;
6) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set points, or alarm delay time, except as detailed in your operation and maintenance plan. Do not increase the sensitivity by more than 100 percent or decrease the sensitivity by more than 50 percent over a 365-day period unless a responsible official certifies, in writing, that the baghouse has been inspected and found to be in good operating condition; and
7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

g. For each CPMS required in Conditions V.A.3.c through V.A.3.e above {§63.7330}, the permittee shall develop and make available for inspection upon request by the Department a site-specific

monitoring plan that addresses the following requirements: [§2102.04.b.6; 63.7331(b)]

1) Installation of the CPMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device);
2) Performance and equipment specifications for the sample interface, the parametric signal analyzer, and the data collection and reduction system;
3) Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations);
4) Ongoing operation and maintenance procedures in accordance with the general requirements of §§63.8(c)(1), (3), (4)(ii), (7), and (8);
5) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
6) Ongoing recordkeeping and reporting procedures in accordance the general requirements of §§63.10(c), (e)(1), and (e)(2)(i).

h. The permittee shall conduct a performance evaluation of each CPMS in accordance with your site-specific monitoring plan. [§2102.04.b.6; 63.7331(c)]

i. The permittee shall operate and maintain the CPMS in continuous operation according to the site-specific monitoring plan. [§2102.04.b.6; 63.7331(d)]

j. If you elect the operating limit in Condition V.A.1.x.1) above {§63.7290(b)(3)} for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure the total volumetric flow rate at the inlet of the control device. [§2102.04.b.6; 63.7331(g)]

k. If you elect the operating limit in Condition V.A.1.x.2) {§63.7290(b)(3)(i)} for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure the fan motor amperes. [§2102.04.b.6; 63.7331(h)]

l. The permittee shall install, operate, and maintain a COMS to measure and record the opacity of emissions exiting the combustion stack according to the following requirements: [§2102.04.b.6; 63.7331(j)]

1) The permittee shall install, operate, and maintain each COMS according to the requirements in §63.8(e) and Performance Specification 1 in 40 CFR 60, Appendix B. Identify periods the COMS is out-of-control, including any periods that the COMS fails to pass a daily calibration drift assessment, quarterly performance audit, or annual zero alignment audit.
2) The permittee shall conduct a performance evaluation of each COMS according to the requirements in §63.8 and Performance Specification 1 in Appendix B to 40 CFR 60;
3) The permittee shall develop and implement a quality control program for operating and maintaining each COMS according to the requirements in §63.8(d). At minimum, the quality control program must include a daily calibration drift assessment, quarterly performance audit, and an annual zero alignment audit of each COMS;
4) Each COMS must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. The permittee shall reduce the COMS data as specified in §63.8(g)(2).
5) The permittee shall determine and record the hourly and daily (24-hour) average opacity according to the procedures in Condition V.A.2.q above {§63.7324(b)} using all the 6-minute averages collected for periods during which the COMS is not out-of-control.

m. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), the permittee shall monitor continuously (or collect data at all required intervals) at all times the affected source is operating. [63.7332(a)]

n. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels, or in fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing compliance. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitor to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [63.7332(b)]

o. For each capture system applied to pushing emissions and subject to the operating limit in Condition V.A.1.x above {§63.7290(b)(3)}, The permittee shall demonstrate continuous compliance by meeting the requirements in Conditions V.A.3.o.1) or V.A.3.o.2): [63.7333(d)]

1) If the permittee elects the operating limit for volumetric flow rate in Condition V.A.1.x.1) above {§63.7290(b)(3)} [63.7333(d)(1)]:

i. Maintaining the daily average volumetric flow rate at the inlet of the control device at or above the minimum level established during the initial or subsequent performance test; and
ii. Checking the volumetric flow rate at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

2) If the permittee elects the operating limit for fan motor amperes in Condition V.A.1.x.2) above{§63.7290(b)(3)(i)} [63.7333(d)(2)]:

i. Maintaining the daily average fan motor amperages at or above the minimum level established during the initial or subsequent performance test; and
ii. Checking the fan motor amperage at least every 8 hours to verify the daily average is at or above the minimum level established during the initial or subsequent performance test and recording the results of each check.

p. Beginning on the first day compliance is required under Conditions V.A.1.u and V.A.1.v above {§63.7283}, the permittee shall demonstrate continuous compliance for C Battery subject to the opacity limit for stacks in Condition V.A.1.y above {§63.7296(a)} by meeting the following requirements: [63.7333(e)]

1) Maintaining the daily average opacity at or below 15 percent for a battery on a normal coking cycle or 20 percent for a battery on battery-wide extended coking; and
2) Operating and maintaining a COMS and collecting and reducing the COMS data according to §63.7331(j).

q. The permittee shall demonstrate continuous compliance with the work practice standards for fugitive pushing emissions according to the following requirements: [§2102.04.b.6; 63.7334(a)]

1) Observe and record the opacity of fugitive emissions for four consecutive pushes per operating day, except you may make fewer or non-consecutive observations as permitted by Condition

V.A.6.k.3) below {§63.7291(a)(3)}. Maintain records of the pushing schedule for each oven and records indicating the legitimate operational reason for any change in the pushing schedule according to Condition V.A.6.k.4) below {§63.7291(a)(4)}.

2) Observe and record the opacity of fugitive emissions from each oven in Coke Oven Battery C at least once every 90 days. If an oven cannot be observed during a 90-day period, observe and record the opacity of the first push of that oven following the close of the 90-day period that can be read in accordance with the procedures in Conditions V.A.3.q.1) through V.A.3.q.8).

3) Make all observations and calculations for opacity observations of fugitive pushing emissions in accordance with Method 9 in Appendix A to 40 CFR 60 using a Method 9 certified observer unless you have an approved alternative procedure in Condition V.A.3.q.7) below.

4) Record pushing opacity observations at 15-second intervals as required in Section 2.4 of Method 9 (Appendix A to 40 CFR Part 60). The requirement in Section 2.4 of Method 9 for a minimum of 24 observations does not apply, and the data reduction requirements in Section 2.5 of Method 9 do not apply. The requirement in §63.6(h)(5)(ii)(B) for obtaining at least 3 hours of observations (thirty 6-minute averages) to demonstrate initial compliance does not apply.

5) If fewer than six but at least four 15-second observations can be made, use the average of the total number of observations to calculate average opacity for the push. Missing one or more observations during the push (e.g., as the quench car passes behind a building) does not invalidate the observations before or after the interference for that push. However, a minimum of four 15-second readings must be made for a valid observation.

6) Begin observations for a push at the first detectable movement of the coke mass. End observations of a push when the quench car enters the quench tower:

   i. Observe fugitive pushing emissions from a position at least 10 meters from the quench car that provides an unobstructed view and avoids interferences from the topside of the battery. This may require the observer to be positioned at an angle to the quench car rather than perpendicular to it. Typical interferences to avoid include emissions from open standpipes and charging. Observe the opacity of emissions above the battery top with the sky as the background where possible. Record the oven number of any push not observed because of obstructions or interferences

   ii. The permittee may reposition after the push to observe emissions during travel if necessary.

7) If it is infeasible to implement the procedures in Conditions V.A.3.q.1)) through V.A.3.q.6) above for an oven due to physical obstructions, nighttime pushes, or other reasons, the permittee may apply to the Department for permission to use an alternative procedure. The application must provide a detailed explanation of why it is infeasible to use the procedures in Conditions V.A.3.q.1)) through V.A.3.q.6), identify the oven and battery numbers, and describe the alternative procedure. An alternative procedure must identify whether the coke in that oven is not completely coked, either before, during, or after an oven is pushed.

8) For each C Battery oven observed that exceeds an opacity of 35 percent for C Battery, the permittee shall take corrective action and/or increase the coking time in accordance with Condition V.A.6.k below {§63.7291(a)}. Maintain records documenting conformance with the

requirements in Condition V.A.6.k below {§63.7291(a)}.

r. The permittee shall demonstrate continuous compliance with the operation and maintenance requirements in Condition V.A.6.p below {§63.7300(b)} by adhering at all times to the plan requirements and recording all information needed to document conformance. [§2102.04.b.6; 63.7335(a)]

s. The permittee shall demonstrate continuous compliance with the PEC system operation and maintenance requirements in Condition V.A.6.q below {§63.7300(c)} by meeting the following requirements: [§2102.04.b.6; 63.7335(b)]

1) Making monthly inspections of capture systems according to Condition V.A.6.q.1) below {§63.7300(c)(1)} and recording all information needed to document conformance with these requirements;
2) Performing preventative maintenance for each control device according to Condition V.A.6.q.2) below {§63.7300(c)(2)} and recording all information needed to document conformance with these requirements; and
3) Initiating and completing corrective action for a bag leak detection system alarm according to Condition V.A.6.q.3) below {§63.7300(c)(3)} and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.

t. To demonstrate continuous compliance with the operation and maintenance requirements for the PEC baghouse in Condition V.A.3.f above {§63.7331(a)}, the permittee shall inspect and maintain each baghouse according to the requirements in Conditions V.A.3.f.1) through V.A.3.f.7) above {§63.7331(a)(1) through (8)} and record all information needed to document conformance with these requirements. If the permittee increases or decreases the sensitivity of the bag leak detection system beyond the limits specified in Condition V.A.3.f.6) above {§63.7331(a)(6)}, the permittee shall include a copy of the required written certification by a responsible official in the next semiannual compliance report. [§2102.04.b.6; 63.7335(c)]

4. Record Keeping Requirements

a. The permittee shall record the time and date a leak is first observed in Battery C collecting main, the time and date the leak is temporarily sealed, and the time and date of repair. [§2102.04.b.6; 63.308(b)]

b. The permittee shall maintain a record of internal reports which form the basis of each malfunction notification under Condition V.A.5.a below {paragraph (d)}. [§2102.04.b.6; 63.310(f)]

c. The Permittee shall maintain files of all required information in a permanent form suitable for inspection at an onsite location for at least 1 year and must thereafter be accessible within 3 working days to the Department for five years. Copies of the work practice plan developed under Conditions V.A.6.a through V.A.6.d below {§63.306} and the startup, shutdown, and malfunction plan developed under Conditions V.A.1.r and V.A.1.s above, V.A.4.b above, V.A.5.a and V.A.5.b below, and V.A.6.h through V.A.6.j below{§63.310} shall be kept onsite at all times. The permittee shall maintain the following information: [§2102.04.b.6; 63.311(f)]

1) A copy of the work practice plan required by Conditions V.A.6.a through V.A.6.d below

{§63.306} and any revision to the plan;

2) If the permittee is required under Condition V.A.6.c below {§63.306(c)} to implement the provisions of a work practice plan for a particular emission point, the following records regarding the implementation of plan requirements for that emission point during the implementation period;
   i. Copies of all written and audiovisual materials used in the training, the dates of each class, the names of the participants in each class, and documentation that all appropriate personnel have successfully completed the training required under Condition V.A.6.b.1) below {§63.306(b)(1)};
   ii. The records required to be maintained by the plan provisions implementing Condition V.A.6.b.7) below {§63.306(b)(7)};
   iii. Records resulting from audits of the effectiveness of the work practice program for the particular emission point, as required under Conditions V.A.6.b.3)a), V.A.6.b.3)h), V.A.6.b.4)a), and V.A.6.b.5)a) below {§63.306(b)(2)(i), 63.306(b)(3)(i), 63.306(b)(4)(i), or 63.306(b)(5)(i)}; and
   iv. If the plan provisions for coke oven doors must be implemented, records of the inventory of doors and jambs as required under Condition V.A.6.b.3)e)e) below {§63.306(b)(2)(vi)}; and
3) The design drawings and engineering specifications for the bypass/bleeder stack flare system or approved alternative control device or system as required under Conditions §V.A.1.n through V.A.1.q above {63.307}.
4) Records specified in Condition V.A.4.b above {§63.310(f)} regarding the basis of each malfunction notification.

d. Records required to be maintained and reports required to be filed with the Department under 40 CFR 63, Subpart L shall be made available in accordance with the following requirements by the permittee to the authorized collective bargaining representative of the employees at a coke oven battery, for inspection and copying. [§2102.04.b.6; 63.311(g)]

1) Requests under Condition V.A.4.d {paragraph (g)} shall be submitted in writing, and shall identify the records or reports that are subject to the request with reasonable specificity;
2) The owner or operator shall produce the reports for inspection and copying within a reasonable period of time, not to exceed 30 days. A reasonable fee may be charged for copying (except for the first copy of any document), which shall not exceed the copying fee charged by the Administrator under 40 CFR Part 2 regarding public information.
3) Nothing in Condition V.A.4.d {paragraph (g)} shall require the production for inspection or copying of any portion of a document that contains trade secrets or confidential business information that the Administrator would be prohibited from disclosing to the public under part 2 of this chapter; and
4) The inspection or copying of a document under Condition V.A.4.d {paragraph (g)} shall not in any way affect any property right of the owner or operator in such document under laws for the protection of intellectual property, including the copyright laws.

e. The permittee shall demonstrate continuous compliance with the work practice standard for soaking in Condition V.A.6.m below by maintaining records that document conformance with requirements in Conditions V.A.6.m.1) through V.A.6.m.5) below {§63.7294(a)(1) through (5)}. [§2102.04.b.6; 63.7334(d)]

f. The permittee shall maintain a current copy of the operation and maintenance plans required in Conditions V.A.6.p and V.A.6.q below {§63.7300(b) and (c)} onsite and available for inspection

upon request. The permittee shall keep the plans for the life of Battery C or until Battery C is no longer subject to the requirements of 40 CFR 63, Subpart CCCCC. [§2102.04.b.6; 63.7335(d)]

g. The permittee shall keep the records specified in the following conditions: [§2102.04.b.6; 63.7342(a)]

1) A copy of each notification and report that the permittee submitted to comply with 40 CFR 63, Subpart CCCCC, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in §63.10(b)(2)(xiv).
2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
3) Records of performance tests, performance evaluations, and opacity observations as required in §63.10(b)(2)(viii).

h. For each COMS or CEMS, the permittee shall keep the records specified in the following requirements: [§2102.04.b.6; 63.7342(b)]

1) Records described in §63.10(b)(2)(vi) through (xi).
2) Monitoring data for COMS during a performance evaluation as required in §63.6(h)(7)(i) and (ii).
3) Previous (that is, superseded) versions of the performance evaluation plan as required in §63.8(d)(3).
4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

i. The permittee shall keep the records in §63.6(h)(6) for visual observations. [§2102.04.b.6; 63.7342(c)]

j. The permittee shall keep the records required by Conditions V.A.1.gg above, V.A.3.o through V.A.3.t above, V.A.4.e and V.A.4.f above {§§63.7333 through 63.7335} to show continuous compliance with each emission limitation, work practice standard, and operation and maintenance requirement. [§2102.04.b.6; 63.7342(d)]

k. The permittee shall keep records in a form suitable and readily available for expeditious review, according to §63.10(b)(1). [§2102.04.b.6; 63.7343(a)]

l. As specified in §63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [§2102.04.b.6; 63.7343(b)]

m. The permittee shall keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). The permittee can keep the records offsite for the remaining 3 years. [§2102.04.b.6; 63.7343(c)]

5. Reporting Requirements:

a. In order for the provisions of V.A.6.j below {63.310(i)} to apply with respect to the observation (or set of observations) for a particular day, notification of a startup, shutdown, or a malfunction shall be made by the Permittee: [§2102.04.b.6; 63.310(d)]

1) If practicable, to the certified observer if the observer is at the facility during the occurrence; or
2) To the Department, in writing, within 24 hours of the occurrence first being documented by a company employee, and if the notification under Condition V.A.5.i.1) below {paragraph (d)(1)} was not made, an explanation of why no such notification was made.

b. Within 14 days of the notification made under Condition V.A.5.a above {paragraph (d)}, or after a startup or shutdown, the permittee shall submit a written report to the Department that: [§2102.04.b.6; 63.310(e)]

1) Describes the time and circumstances of the startup, shutdown, or malfunction; and
2) Describes actions taken that might be considered inconsistent with the startup, shutdown, or malfunction plan.

c. Use of information provided by the certified observer shall be a sufficient basis for notifications required under § 70.5(c)(9) and the reasonable inquiry requirement of § 70.5(d). [§2102.04.b.6; 63.311(a)]

d. The permittee shall provide a written statement(s) to certify initial compliance to the Department within 45 days of the applicable compliance date for the emission limitations or requirements in 40 CFR 63, Subpart L. The permittee shall include the following information in the initial compliance certification: [§2102.04.b.6; 63.311(b)]

1) Statement signed by the permittee, certifying that a bypass/bleeder stack flare system or an approved alternative control device or system has been installed as required in Conditions V.A.1.n through V.A.1.q above {§63.307}; and
2) Statement, signed by the owner or operator, certifying that a written startup, shutdown, and malfunction plan has been prepared as required in Conditions V.A.1.r, V.A.1.s above, V.A.4.b above, V.A.5.a and V.A.5.b above, and below through V.A.6.j below {§63.310}.

e. The semiannual compliance certification for Coke Oven Battery C shall include the following information: [§2102.04.b.6; 63.311(d)]

1) Certification, signed by the permittee, that no coke oven gas was vented, except through the bypass/bleeder stack flare system of a by-product coke oven battery during the reporting period or that a venting report has been submitted according to the requirements in Condition V.A.5.f below {paragraph (e)}.
2) Certification, signed by the permittee, that a startup, shutdown, or malfunction event did not occur for a coke oven battery during the reporting period or that a startup, shutdown, and malfunction event did occur and a report was submitted according to the requirements in Condition V.A.5.b above {§63.310(e)}.
3) Certification, signed by the permittee, that work practices were implemented if applicable under Conditions V.A.6.a through V.A.6.d below {§63.306}.

f. The permittee shall report any venting of coke oven gas through a bypass/bleeder stack that was not vented through the bypass/bleeder stack flare system to the Department as soon as practicable but no later than 24 hours after the beginning of the event. A written report shall be submitted within 30 days of the event and shall include a description of the event and, if applicable, a copy of the notification for a hazardous substance release required pursuant 40 CFR Part 302.6. [§2102.04.b.6; 63.311(e)]

g. The permittee shall submit a notification of compliance status containing the results of the COMS performance test for battery stacks according to Condition V.A.5.p.1) below {§63.7340(e)(1)}. For each particulate matter emission limitation that applies to you, the permittee shall submit a notification of compliance status containing the results of the performance test according to Condition V.A.5.p.2) below {§63.7340(e)(2)}. [§2102.04.b.6; 63.7326(d)]

h. The permittee has demonstrated initial compliance if the permittee certifies in the notification of compliance status that each of the work practice requirements will be met beginning no later than the compliance date that is specified in V.A.1.u and V.A.1.v above {§63.7283(c&d)} [§2102.04.b.6; 63.7327a)]

i. Initial compliance has been demonstrated if the permittee has met the following requirements: [§2102.04.b.6; 63.7327(d)]

1) A written work practice plan for soaking has been prepared and submitted in accordance with Condition V.A.6.m below {§63.7294(a)}; and
2) The permittee certifies in the notification of compliance status that each of the soaking work practice requirements will be met beginning no later than the compliance date specified in Conditions V.A.1.u and V.A.1.v above {§63.7283}.

j. Initial compliance has been demonstrated, if the permittee certifies in the notification of compliance status that the following requirements have been met: [§2102.04.b.6; 63.7328]

1) The permittee has prepared the operation and maintenance plans according to the requirements in Conditions V.A.6.p and V.A.6.q below {§63.7300(b) and (c)}; [§2102.04.b.6; 63.7328(a)]
2) The permittee has operated coke oven at C Battery and each capture system and control device applied to pushing emissions from a coke oven battery according to the procedures in the plans beginning no later than the compliance date that is specified in Conditions V.A.1.u and V.A.1.v above {§63.7283}; [§2102.04.b.6; 63.7328(b)]
3) The permittee has prepared a site-specific monitoring plan according to the requirements in §63.7331(b); and [§2102.04.b.6; 63.7328(c)]
4) The permittee has submitted a notification of compliance status according to the requirements in Condition V.A.5.p below {§63.7340(e)}. [§2102.04.b.6; 63.7328(d)]

k. Deviations. The permittee shall report each instance in which each emission limitation in 40 CFR Part 60, Subpart CCCCC that applies was not met. This includes periods of startup, shutdown, and malfunction. The permittee shall also report each instance in which each work practice standard or operation and maintenance requirement in 40 CFR 63, Subpart CCCCC that applies was not met. These instances are deviations from the emission limitations (including operating limits), work practice standards, and operation and maintenance requirements in 40 CFR 63, Subpart CCCCC. These deviations must be reported according to the requirements in Conditions V.A.5.q through V.A.5.t below {§63.7341}. [§2102.04.b.6; 63.7336(a)]

l. *Startup,* shutdowns, *and malfunctions.* (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if the permittee demonstrates to the Department's and the Administrator's satisfaction that the permittee was operating in accordance with §63.6(e)(1). In no case shall the reporting of a malfunction that is considered a breakdown prevent prosecution for any violation of this permit or Article XXI. [§2102.04.b.6; 63.7336(b); §2108.01.c.6]

m. The permittee shall submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e)

and (f)(4), and 63.9(b) through (h) that apply by the specified dates. [§2102.04.b.6; 63.7340(a)]

n. As specified in §63.9(b)(3), , the permittee shall submit the initial notification no later than 120 calendar days after becoming subject to 40 CFR 63, Subpart CCCCC. [§2102.04.b.6; 63.7340(c)]

o. The permittee shall submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). [§2102.04.b.6; 63.7340(d)]

p. The permittee shall submit a notification of compliance status according to §63.9(h)(2)(ii) if a performance test, opacity observation, or other initial compliance demonstration is required to be conducted,. [§2102.04.b.6; 63.7340(e)]

1) For each initial compliance demonstration that does not include a performance test, the permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

2) For each initial compliance demonstration that does include a performance test, the permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to §63.10(d)(2).

q. Compliance *report due dates.* Unless the Administrator and the Department have approved a different schedule, the permittee shall submit quarterly compliance reports for battery stacks and semiannual compliance reports for all other affected sources to the Department according to the following requirements: §[63.7341(a)]

1) The first quarterly compliance report for battery stacks must cover the period beginning on the compliance date that is specified in Conditions V.A.1.u and V.A.1.v above {§63.7283} and ending on the last date of the third calendar month. Each subsequent compliance report must cover the next calendar quarter.

2) The first semiannual compliance report must cover the period beginning on the compliance date that is specified in Conditions V.A.1.u and V.A.1.v above {§63.7283} and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified. Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

3) All quarterly compliance reports for battery stacks must be postmarked or delivered no later than one calendar month following the end of the quarterly reporting period. All semiannual compliance reports must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

r. *Quarterly compliance report contents.* Each quarterly report must provide information on compliance with the emission limitations for battery stacks in Condition V.A.1.y above {§63.7296}. The reports must include the information in Conditions V.A.5.s.1) through V.A.5.s.3) below {§63.7341(c)(1)-(3)}, and as applicable, in Conditions V.A.5.s.4) through V.A.5.s.8) below {§63.7341(c)(4)-(8)}. [§2102.04.b.6; 63.7341(b)]

s. *Semiannual* compliance *report contents.* Each compliance report must provide information on

compliance with the emission limitations, work practice standards, and operation and maintenance requirements for all affected sources except battery stacks. The reports must include the information in Conditions V.A.5.s.1) throughV.A.5.s.3), and as applicable, Conditions V.A.5.s.4) through V.A.5.s.8) below. [§2102.04.b.6; 63.7341(c)]

1) Company name and address.
2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
3) Date of report and beginning and ending dates of the reporting period.
4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).
5) If there were no deviations from the continuous compliance requirements in Condition V.A.3.p above§63.7333(e) for battery stacks, a statement that there were no deviations from the emission limitations during the reporting period. If there were no deviations from the continuous compliance requirements in Conditions V.A.1.gg above and V.A.3.o through V.A.3.t above {§§63.7333 through 63.7335} that apply to you (for all affected sources other than battery stacks), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.
6) If there were no periods during which a continuous monitoring system (including COMS, continuous emission monitoring system (CEMS), or CPMS) was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which a continuous monitoring system was out-of-control during the reporting period.
7) For each deviation from an emission limitation in 40 CFR 63, Subpart CCCCC (including quench water limits) and for each deviation from the requirements for work practice standards in 40 CFR 63, Subpart CCCCC that occurs at an affected source where you are not using a continuous monitoring system (including a COMS, CEMS, or CPMS) to comply with the emission limitations in 40 CFR 63, Subpart CCCCC, the compliance report must contain the information in Conditions V.A.5.s.4) and V.A.5.s.7) above. This includes periods of startup, shutdown, and malfunction.
   i. The total operating time of each affected source during the reporting period.
   ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.
8) For each deviation from an emission limitation occurring at an affected source where you are using a continuous monitoring system (including COMS, CEMS, or CPMS) to comply with the emission limitation in 40 CFR 63, Subpart CCCCC, the permittee shall include the information in Conditions V.A.5.s.4) above and V.A.5.s.8)a) through V.A.5.s.8)l) below. This includes periods of startup, shutdown, and malfunction.

   i. The date and time that each malfunction started and stopped.
   ii. The date and time that each continuous monitoring system (including COMS, CEMS, or CPMS) was inoperative, except for zero (low-level) and high-level checks.
   iii. The date, time, and duration that each continuous monitoring system (including COMS, CEMS, or CPMS) was out-of-control, including the information in §63.8(c)(8).
   iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
   v. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
   vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other

known causes, and other unknown causes.

vii. A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

viii. An identification of each HAP that was monitored at the affected source.

ix. A brief description of the process units.

x. A brief description of the continuous monitoring system.

xi. The date of the latest continuous monitoring system certification or audit.

xii. A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

t. *Immediate* startup, *shutdown, and malfunction report.* If the permittee had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, the permittee shall submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii). §[63.7341(d)]

u. Reporting instances of non-compliance, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level Condition IV.8, if appropriate. (§2102.04.b.4)

6. Work Practice Standard:

a. The permittee shall prepare and submit a written emission control work practice plan for Coke Oven Battery C. The plan shall be designed to achieve compliance with visible emission limitations for coke oven doors, topside port lids, offtake systems, and charging operations under 40 CFR 63, Subpart L. [§2102.04.b.6; 63.306(a)]

1) The work practice plan must address each of the topics specified in Condition V.A.6.b in sufficient detail and with sufficient specificity to allow the reviewing authority to evaluate the plan for completeness and enforceability.

2) The initial plan and any revisions shall be submitted to the Department. The Department may require revisions to the initial plan only where the Department finds either that the plan does not address each subject area listed in Condition V.A.6.b for each emission point subject to a visible emission standard under this 40 CFR 63, Subpart L, or that the plan in unenforceable because it contains requirements that are unclear.

3) During any period of time that an owner or operator is required to implement the provisions of a plan for a particular emission point, the failure to implement one or more obligations under the plan and/or any recordkeeping requirement(s) under Condition V.A.4.c.4) above {§63.311(f)(4)} for the emission point during a particular day is a single violation.

b. The permittee shall organize the work practice plan to indicate clearly which parts of the plan pertain to each emission point subject to visible emission standards under 40 CFR 63 Subpart L. Each of the following provisions, at a minimum, shall be addressed in the plan: [§2102.04.b.6; 63.306(b)]]

1) An initial and refresher training program for all coke plant operating personnel with responsibilities that impact emissions, including contractors, in job requirements related to emission control and the requirements of 40 CFR 63, Subpart L, including work practice requirements. Contractors with responsibilities that impact emission control may be trained by

the permittee or by qualified contractor personnel; however, the permittee shall ensure that the contractor training program complies with the requirements of Condition V.A.6.b. The training program in the plan must include:

i. A list, by job title, of all personnel that are required to be trained and the emission point(s) associated with each job title;
ii. An outline of the subjects to be covered in the initial and refresher training for each group of personnel;
iii. A description of the training method(s) that will be used (e.g., lecture, video tape);
iv. A statement of the duration of initial training and the duration and frequency of refresher training;
v. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion of the initial and refresher training; and
vi. A description of the procedure to be used to document performance of plan requirements pertaining to daily operation of the coke oven battery and its emission control equipment, including a copy of the form to be used, if applicable, as required under the plan provisions implementing Condition V.A.6.b.6) below.

2) Procedures for the proper operation of the PROven® System shall include:

i. Inspection, repair, and replacement of PROven® System components, including the frequency of inspections and methods to be used to evaluate conformance with the operating pressure limits for the collector main and individual ovens as specified in the work practice plan.
ii. Procedures for maintaining an adequate inventory of spare parts for the PROven® System
iii. Procedures for monitoring and recording collecting main and individual oven pressures.

3) Procedures for controlling emissions from coke oven doors on C Battery, including:

i. A program for the inspection, adjustment, repair, and replacement of coke oven doors and jambs, PROven® System components, and any other equipment for controlling emissions from coke oven doors, including a defined frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
ii. Procedures for identifying leaks that indicate a failure of the PROven® System components and emissions control equipment to function properly, including a clearly defined chain of command for communicating information on leaks and procedures for corrective action;
iii. Procedures for cleaning all sealing surfaces of each door and jamb, including identification of the equipment that will be used and a specified schedule or frequency for the cleaning of sealing surfaces;
iv. Procedures for use of supplemental gasketing and luting materials, the permittee elects to use such procedures as part of the program to prevent exceedances;
v. Procedures for maintaining an adequate inventory of the number of spare coke oven doors and jambs located onsite; and
vi. Procedures for monitoring and controlling collecting main pressure by use of the PROven® System, including corrective action if pressure control problems occur.
vii. Procedures for controlling emissions from charging operations on by-product coke oven batteries, including:

viii. Procedures for equipment inspections, including the frequency of inspections, and replacement or repair of equipment for controlling emissions from charging, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
ix. Procedures for ensuring that the larry car hoppers are filled properly with coal;
x. Procedures for the alignment of the larry car over the oven to be charged;
xi. Procedures for filling the oven (e.g., procedures for staged or sequential charging);
xii. Procedures for ensuring that the coal is leveled properly in the oven; and
xiii. Procedures and schedules for inspection and cleaning of offtake systems (including standpipes, standpipe caps, goosenecks, dampers, and mains), oven roofs, charging holes, topside port lids, the steam supply system, and liquor sprays.

4) Procedures for controlling emissions from topside port lids on C Battery, including:

i. Procedures for equipment inspection and replacement or repair of topside port lids and port lid mating and sealing surfaces, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances; and
ii. Procedures for sealing topside port lids after charging, for identifying topside port lids that leak, and procedures for resealing.

5) Procedures for controlling emissions from offtake system(s) on C Battery, including:

i. Procedures for equipment inspection and replacement or repair of offtake system components, including the frequency of inspections, the method to be used to evaluate conformance with operating specifications for each type of equipment, and the method to be used to audit the effectiveness of the inspection and repair program for preventing exceedances;
ii. Procedures for identifying offtake system components that leak and procedures for sealing leaks that are detected; and
iii. Procedures for dampering off ovens prior to a push.
iv. Procedures requiring that if visible emissions are observed from the standpipe, the oven will be reconnected to the collector main. [§2102.04.b.6]

6) Procedures for maintaining, for each emission point subject to visible emission limitations under 40 CFR 63, Subpart L, a daily record of the performance of plan requirements pertaining to the daily operation of the coke oven battery and its emission control equipment, including:

i. Procedures for recording the performance of such plan requirements; and
ii. Procedures for certifying the accuracy of such records by the owner or operator.

7) Any additional work practices or requirements specified by the Department according to Condition V.A.6.d below.

c. The permittee shall implement the provisions of the coke oven emission control work practice plan according to the following requirements: [§2102.04.b.6; §63.306(c)]

1) Implement the provisions of the work practice plan pertaining to a particular emission point

following the second independent exceedance of the visible emission limitation for the emission point in any consecutive 6-month period, by no later than 3 days after receipt of written notification of the second such exceedance from the certified observer. For the purposes of this paragraph, the second exceedance is "independent" if either of the following criteria is met:

i. The second exceedance occurs 30-days or more after the first exceedance;
ii. In the case of coke oven doors, top-side port lids, and offtake systems, the 29-run average, calculated by excluding the highest value in the 30-day period, exceeds the value of the applicable emission limitation; or
iii. In the case of charging emissions, the 29-day logarimithic average, calculated in accordance with Method 303 in Appendix of 40 CFR § 63 by excluding the valid daily set of observations in the 30-day period that had the highest arithmetic average, exceeds the value of the applicable emission limitation.

2) Continue to implement such plan provisions until the visible emission limitation for the emission point is achieved for 90 consecutive days if work practice requirements are implemented pursuant to paragraph c(1)(i) of 40 CFR § 63.306. After the visible emission limitation for a particular emission point is achieved for 90 consecutive days, any exceedance prior to the beginning of the 90 days are not included in making a determination under paragraph c(1)(i) of 40 CFR § 63.306.

d. Revisions to the work practice emission control plan will be governed by the provisions in Conditions V.A.6.d and V.A.6.a.2) above {paragraph (d) and in paragraph (a)(2)}. The reviewing authority is the Administrator or the Department. [§2102.04.b.6; 63.306(d)]

1) The Department may request the owner or operator to review and revise as needed the work practice emission control plan for a particular emission point if there are 2 exceedances of the applicable visible emission limitation in the 6-month period that starts 30 days after the owner or operator is required to implement work practices under Condition V.A.6.c above {63.306(c)}. In the case of a coke oven battery subject to visual emission limitations under 40 CFR 63, Subpart L, the second exceedance must be independent of the criteria in Condition V.A.6.c.1) above {paragraph (c)(1)((i)}.

2) The Department may not request the owner or operator to review and revise the plan more than twice in any 12 consecutive month period for any particular emission point unless the Department disapproves the plan according to the provisions in Condition V.A.6.d.5) below {paragraph (d)(6)}.If the certified observer calculates that a second exceedance (or, if applicable, a second independent exceedance) has occurred, the certified observer shall notify the owner or operator. No later than 10 days after receipt of such a notification, the owner or operator shall notify the Department of any finding of whether work practices are related to the cause or the solution of the problem. The notification is subject to review by the Department according to the provisions in Condition V.A.6.d.5) below {paragraph (d)(6)}.

3) The permittee shall submit a revised work practice plan within 60 days of notification from the Department under Condition V.A.6.d.1) above {paragraph (d)(1)}, unless the Department grants an extension of time to submit the revised plan.

4) If the Department requires a plan revision, the Department may require the plan to address a subject area or areas in addition to those in Condition V.A.6.b above {§63.306(b)}, if the

Department determines that without plan coverage of such an additional subject area, there is a reasonable probability of further exceedances of the visible emission limitation for the emission point for which a plan revision is required.

5) The Department may disapprove a plan revision required under Condition V.A.6.d above {§63.306(d)} if the Department determines that the revised plan is inadequate to prevent exceedances of the visible emission limitation under 40 CFR Part 63 Subpart L; for the emission point for which a plan revision is required The Department may also disapprove the finding that may be submitted pursuant to Condition V.A.6.d.3) above {§63.306(d) (3)} if the Department determines that a revised plan is needed to prevent exceedances of the applicable visible emission limitations.

e. The permittee shall temporarily seal any leak in the collecting main as soon as possible after detection, but no later than 4 hours after detection of the leak. [§2102.04.b.6; 63.308(c)]

f. The permittee shall initiate a collecting main repair as expeditiously as possible but no later than 5 calendar days after initial detection of the leak. The repair shall be completed within 15 calendar days after initial detection of the leak unless an alternative schedule is approved by the Department. [§2102.04.b.6; 63.308(d)]

g. The permittee shall develop, according to Condition V.A.1.s above {§63.310(c)} , a written startup, shutdown, and malfunction plan for Coke Battery C that describes procedures for operating the battery, including associated air pollution control equipment, during a period of a startup, shutdown, or malfunction in a manner consistent with good air pollution control practices for minimizing emissions, and procedures for correcting malfunctioning process and air pollution control equipment as quickly as practicable. [§2102.04.b.6; 63.310(b)]

h. To satisfy the requirements §63.310 to develop a startup, shutdown, and malfunction plan, the permittee may use the standard operating procedures manual for the battery, provided the manual meets all the requirements for this section and is made available for inspection at reasonable times when requested by the Department. [§2102.04.b.6; 63.310(g)]

i. The Department or the Administrator may require reasonable revisions to a startup, shutdown, and malfunction plan, if the Department or Administrator find that the plan: [§2102.04.b.6; 63.310(h)]

1) Does not address a startup, shutdown, or malfunction event that has occurred;

2) Fails to provide for the operation of the source (including associated air pollution control equipment) during a startup, shutdown, or malfunction event in a manner consistent with good air pollution control practices for minimizing emissions; or

3) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control equipment as quickly as practicable.

j. If the permittee demonstrates to the satisfaction of the Department and the Administrator that a startup, shutdown, or malfunction has occurred, then an observation occurring during such startup, shutdown, or malfunction shall not: [§2102.04.b.6; 63.310(i)]

1) Constitute a violation of relevant requirements of 40 CFR Part 63 Subpart L;

2) Be used in any compliance determination under Conditions V.A.2.a through V.A.2.k above {§63.309}; or

3) Be considered for purposes of Conditions V.A.6.a through V.A.6.d above {§63.306}, until the Department has resolved the claim that a startup, shutdown, or malfunction has occurred. If the Department or the Administrator determines that a startup, shutdown, or malfunction has not occurred, such observations may be used for purposes of §63.306, regardless of whether the owner or operator further contests such determination. The owner's or operator's receipt of written notification from the Department and the Administrator that a startup, shutdown, or malfunction has not occurred will serve, where applicable under Conditions V.A.6.a through V.A.6.d above {§63.306}, as written notification from the certified observer that an exceedance has occurred.

k. The permittee shall meet each of the following requirements: [§2102.04.b.6; 63.7291(a)]

1) Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, the permittee shall observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in Condition V.A.3.q above {§63.7334(a)}, and the permittee shall document why the oven was not observed within a 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in Condition V.A.3.q above {§63.7334(a)}. [§2102.04.b.6; 63.7291(a)(1)]

2) If two or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery. [§2102.04.b.6; 63.7291(a)(2)]

3) Observe and record the opacity of fugitive pushing emissions for at least four consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of four pushes. If necessary due to circumstances that were not reasonably avoidable, you may observe fewer than four consecutive pushes in a day; however, the permittee shall observe and record as many consecutive pushes as possible and document why four consecutive pushes could not be observed. You may observe and record one or more non-consecutive pushes in addition to any consecutive pushes observed in a day. [§2102.04.b.6; 63.7291(a)(3)]

4) Do not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Keep records indicating the legitimate operational reason for any change in your pushing schedule which results in a change in the sequence of consecutive pushes observed on any day. [§2102.04.b.6; 63.7291(a)(4)]

5) If the average opacity for any individual push exceeds 35 percent opacity, the permittee shall take corrective action and/or increase coking time for that oven. The permittee shall complete corrective action or increase coking time within either 10 calendar days or the number of days determined using Equation 1 below, whichever is greater:

$X = 0.55 * Y$ (Eq. 1)

Where:

X = Number of calendar days allowed to complete corrective action or increase coking time; and

Y = Current coking time for the oven, hours.

For the purpose of determining the number of calendar days allowed under Equation 1 above, day one is the first day following the day you observed an opacity in excess of 35 percent for any tall battery. Any fraction produced by Equation 1 must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action. [§2102.04.b.6; 63.7291(a)(5)]

6) The permittee shall demonstrate that [§2102.04.b.6; 63.7291(a)(6)]:

i. The corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in Condition V.A.6.k.5) above, observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in Condition V.A.3.q above {§63.7334(a)}. The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in Condition V.A.6.k.1) above. If the average opacity of either push exceeds 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and the permittee shall complete additional corrective action and/or increase coking time for that oven within the number of days allowed in Condition V.A.6.k.5) above. [§2102.04.b.6; 63.7291(a)(6)(i)]

ii. After implementing any additional corrective action and/or increased coking time required in Conditions V.A.6.k.6)a) above or V.A.6.k.7)b) below, the permittee shall demonstrate that corrective action and/or increased coking time was successful. After a period of time no longer than the number of days allowed in Condition V.A.6.k.5) above, the permittee shall observe and record the opacity of the first two pushes for the oven capable of being observed using the procedures in Condition V.A.3.q above {§63.7334(a)}. The corrective action and/or increased coking time was successful if the average opacity for each of the two pushes is 35 percent or less for a tall battery. If the corrective action and/or increased coking time was successful, you may return the oven to the 90-day reading rotation described in Condition V.A.6.k.1) above. If the average opacity of either push exceeds 35 percent for a tall battery, the corrective action and/or increased coking time was unsuccessful, and the permittee shall follow the procedures in Condition V.A.6.k.6)c) below. [§2102.04.b.6; 63.7291(a)(6)(ii)]

iii. If the corrective action and/or increased coking time was unsuccessful as described in Condition V.A.6.k.6)b), the permittee shall repeat the procedures in Condition V.A.6.k.6)b) above until the corrective action and/or increased coking time is successful. The permittee shall report to the Department as a deviation each unsuccessful attempt at corrective action and/or increased coking time in Condition V.A.6.k.6)b). [§2102.04.b.6; 63.7291(a)(6)(iii)]

7) If at any time the permittee places an oven on increased coking time as a result of fugitive pushing emissions that exceed 35 percent for a tall battery, the permittee shall keep the oven on the increased coking time until the oven qualifies for decreased coking time using the

procedures in Conditions V.A.6.k.7)a) or V.A.6.k.7)b) below [§2102.04.b.6; 63.7291(a)(7i)]:

i. To qualify for a decreased coking time for an oven placed on increased coking time in accordance with Conditions V.A.6.k.5) or V.A.6.k.6) above, the permittee shall operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, the permittee shall observe and record the opacity of the first two pushes that are capable of being observed using the procedures in Condition V.A.6.b.6)b) {§63.7334(a)}. If the average opacity for each of the two pushes is 35 percent or less for a tall battery, you may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in Condition V.A.6.k.1) above. If the average opacity of either push exceeds 35 percent for a tall battery, the attempt to qualify for a decreased coking time was unsuccessful. The permittee shall then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, the permittee shall follow the procedures in Condition V.A.6.k.6)b) above to confirm that the corrective action(s) and/or increased coking time was successful. [§2102.04.b.6; 63.7291(a)(7)(ii)]

ii. If the attempt to qualify for decreased coking time was unsuccessful as described in Condition V.A.6.k.7)a) above, the permittee may again attempt to qualify for decreased coking time for the oven. To do this, the permittee shall operate the oven on the decreased coking time. After no more than two coking cycles on the decreased coking time, the permittee shall observe and record the opacity of the first two pushes that are capable of being observed using the procedures in §63.7334(a). If the average opacity for each of the two pushes is 35 percent or less, the permittee may keep the oven on the decreased coking time and return the oven to the 90-day reading rotation described in Condition V.A.6.k.1) above. If the average opacity of either push exceeds 35 percent, the attempt to qualify for a decreased coking time was unsuccessful. The permittee shall then return the oven to the previously established increased coking time, or implement other corrective action(s) and/or increased coking time. If you implement other corrective action and/or a coking time that is shorter than the previously established increased coking time, the permittee shall follow the procedures in Condition V.A.6.k.6)b) above to confirm that the corrective action(s) and/or increased coking time was successful. [§2102.04.b.6; 63.7291(a)(7)(iii)]

iii. The permittee shall report to the Department as a deviation the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in Condition V.A.6.k.7)b) above [§2102.04.b.6; 63.7291(a)(7)(iv)].

l. As provided in §63.6(g), the permittee may request to use an alternative to the work practice standards in Condition V.A.6.k above {§63.7291(a)}. [§2102.04.b.6; 63.7291(b)]

m. The permittee shall prepare and operate at all times according to a written work practice plan for soaking. Each plan must include measures and procedures to: [§2102.04.b.6; 63.7294(a)]

1) Train topside workers to identify soaking emissions that require corrective actions.

2) Damper the oven off the collecting main prior to opening the standpipe cap.
3) Determine the cause of soaking emissions that do not ignite automatically, including emissions that result from raw coke oven gas leaking from the collecting main through the damper, and emissions that result from incomplete coking.

4) If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Corrective actions may include, but are not limited to, reseating the damper, cleaning the flushing liquor piping, using aspiration, putting the oven back on the collecting main, or igniting the emissions.

5) If soaking emissions are not caused by leaks from the collecting main, notify a designated responsible party. The responsible party must determine whether the soaking emissions are due to incomplete coking. If incomplete coking is the cause of the soaking emissions, the permittee shall put the oven back on the collecting main until it is completely coked or the permittee shall ignite the emissions.

n. As provided in §63.6(g), you may request to use an alternative to the work practice standard in Condition V.A.6.m above {§63.7294(a))}. [§2102.04.b.6; 63.7294(b)]

o. As required by §63.6(e)(1)(i), the permittee shall always operate and maintain Coke Oven Battery C, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by 40 CFR 63, Subpart CCCCC and the requirements in this installation permit. [§2102.04.b.6; 63.7300(a)]

p. The permittee shall prepare and operate at all times according to a written operation and maintenance plan for the general operation and maintenance of Coke Oven Battery C. Each plan must address, at a minimum, the following elements: [§2102.04.b.6; 63.7300(b)]

1) Frequency and method of recording underfiring gas parameters.
2) By use of the PROven® system, establish a range of acceptable operating pressures for the collector main and individual ovens to insure that charging emissions and door, lid and offtake leaks are minimized.
3) Procedures to insure that the PROven® system maintains the collector main at a negative pressure and that each individual C Battery oven is maintained at the minimum positive pressure necessary to prevent air ingress into the oven and door, lid and offtake leaks.
4) Frequency and method of recording collector main and oven internal pressure.
5) Frequency and procedures for inspecting PROven® system components.
6) Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures.
7) Procedures to prevent pushing an oven before it is fully coked.
8) Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged.
9) Frequency and procedures for inspecting flues, burners, and nozzles.
10) Schedule and procedures for the daily washing of baffles.

q. The permittee shall prepare and operate at all times according to a written operation and maintenance plan for each capture system and control device applied to pushing emissions from Coke Oven Battery C. Each plan must address at a minimum the following elements: [§2102.04.b.6; 63.7300(c)]

1) Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in ductwork or hoods, flow constrictions caused by dents or accumulated dust in ductwork, and fan erosion).

In the event a defect or deficiency is found in the capture system (during a monthly inspection or between inspections), the permittee shall complete repairs within 30 days after the date that the defect or deficiency is discovered. If the permittee determines that the repairs cannot be completed within 30 days, the permittee shall submit a written request for an extension of time to complete the repairs that must be received by the Department not more than 20 days after the date that the defect or deficiency is discovered. The request must contain a description of the defect or deficiency, the steps needed and taken to correct the problem, the interim steps being taken to mitigate the emissions impact of the defect or deficiency, and a proposed schedule for completing the repairs. The request shall be deemed approved unless and until such time as the Department notifies the permittee that it objects to the request. The Department may consider all relevant factors in deciding whether to approve or deny the request (including feasibility and safety). Each approved schedule must provide for completion of repairs as expeditiously as practicable, and the Department may request modifications to the proposed schedule as part of the approval process. [§2102.04.b.6; 63.7300(c)(1)]

2) Preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance. [§2102.04.b.6; 63.7300(c)(2)]

3) Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, the permittee shall initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Actions may include, but are not limited to[§2102.04.b.6; 63.7300(c)(3)] :

i. Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.
ii. Sealing off defective bags or filter media.
iii. Replacing defective bags or filter media or otherwise repairing the control device.
iv. Sealing off a defective baghouse compartment.
v. Cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system.
vi. Shutting down the process producing the particulate emissions.

7. Additional Requirements

a. The permittee shall comply with each applicable requirement of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in Table 1 in 40 CFR 63, Subpart CCCCC. [§2102.04.b.6; 63.7350]

b. The permittee shall notify the Department in writing ten (10) days prior to the start-up of the Coke Oven Battery C heat-up process whereby each oven will have an auxiliary burner on the pusher-side and on the coke-side to begin gradual heat-up of the refractory. The installation of the equipment included in this permit shall be inspected and approved by the Department before commencement of the heat-up process. (§2102.04.b.6)

B. Process P002: Battery C Quench Tower

Process Description:	Water quenching of incandescent coke
Facility ID:	P047
Max. Design Rate/Units:	1,379,059 tons of coal per year
Capacity:	1,107,384 tons of coke per year
Raw Materials:	Incandescent Coke
Control Device(s):	Two sets of Kiro-Nathaus baffles or their approved equivalents

The permittee is also subject to the following conditions:

1. Restrictions

a. The permittee shall not quench, or allow the quenching of, coke unless the emissions from such quenching are vented through a baffled quench tower and the water used for such quenching is equivalent to, or better than, the water quality standards established for the nearest stream or river by regulations promulgated by the DEP under the Pennsylvania Clean Streams Law, Act of June 22, 1937, PL. 1987, as amended, 35 P.S. 691.1 et seq., except that water from the nearest stream or river may be used for the quenching of coke. The nearest stream or river to the United States Steel Corporation facility in Clairton, PA, shall be the Monongahela River. [§2102.04.b.6; 2105.21.g]

b. The permittee shall meet the following requirements for each quench tower and backup quench station: [§2102.04.b.6; 63.7295(a)]

1) For the quenching of hot coke, the permittee shall meet the requirements in Conditions V.B.1.b.1)a) orV.B.1.b.1)ii below:

i. The concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/L); or

ii. The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the Department.

2) The permittee shall use acceptable makeup water, as defined in §63.7352, as makeup water for quenching.

c. The permittee has demonstrated initial compliance with the TDS limit in Condition V.B.1.b.1)a) above {§63.7295(a)(1)(i)} if the TDS concentration, as measured according to the performance test procedures in Condition V.B.2.b below{§63.7325(a)}, does not exceed 1,100 mg/L. [§2102.04.b.6; 63.7326(c)(1)]

d. The permittee has demonstrated initial compliance with the constituent limit in Condition V.B.1.b.1)b) above{§63.7295(a)(1)(ii)} if [§63.7326(c)(2)]:

a) The permittee has established a site-specific constituent limit according to the procedures in Condition V.B.2.c below{§63.7325(b)}; and

b) The sum of the constituent concentrations, as measured according to the performance test procedures in Condition V.B.2.d below {§63.7325(c)}, is less than or equal to the site-specific limit.

e. Emissions from the Battery C Quench Tower shall not exceed the limitations in Table 3: [§2102.04.b.6; IP 0052-I017, Condition V.B.1.c]

Table 3 - C Battery Quench Tower Emission Limitations

POLLUTANT	LBS/HR	TPY [1]
Particulate Matter	24.7	108.3
PM-10	24.1	105.5
PM-2.5	23.7	103.8
Sulfur Dioxides	5.0	21.90
Volatile Organic Compounds	10	44
Total Reduced Sulfur	34.0	148.9
Cyanide Compounds	0.3	1.3

[1]A year is defined as any 12 consecutive months

2. Testing Requirements

a. The permittee shall conduct performance tests to demonstrate compliance with the TDS limit or constituent limit for quench water in Condition V.B.1.b.1) above {§63.7295(a)(1)} by the compliance date that is specified in Condition V.A.1.u above {§63.7283(c)}. [§2102.04.b.6; 63.7320(b)]

b. If the permittee elects the TDS limit for quench water in Condition V.B.1.b.1)a) {§63.7295(a)(1)(i)} the permittee shall conduct each performance test according to the following conditions: [§2102.04.b.6; 63.7325(a)]

1) Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions. [§2102.04.b.6; 63.7325(a)(1)]

2) Determine the TDS concentration of the sample using Method 160.1 in 40 CFR part 136.3 (see "residue—filterable"), except that the permittee shall dry the total filterable residue at 103 to 105 °C (degrees Centigrade) instead of 180 °C. [§2102.04.b.6; 63.7325(a)(2)]

c. If at any time the permittee elects to meet the alternative requirements for quench water in Condition V.B.1.b.1)b) above {§63.7295(a)(1)(ii)} the permittee shall establish a site-specific constituent limit according to the following procedures: [§2102.04.b.6; 63.7325(b)]

1) Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (*e.g.,* from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

2) For each sample, determine the TDS concentration according to the requirements in Condition

V.B.2.b.2) above and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 CFR Part 136 or an approved alternative method.

3) Determine and record the highest sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 mg/L. This concentration is the site-specific constituent limit.

4) Submit the site-specific limit, sampling results, and all supporting data and calculations to the Department for review and approval.

d. If the permittee elects the constituent limit for quench water in Condition V.B.1.b.1)b) a{§63.7295(a)(1)(ii)}, the permittee shall conduct each performance test according to the following conditions: [§2102.04.b.6; 63.7325(c)]

1) Take a quench water sample from a location that provides a representative sample of the quench water as applied to the coke (*e.g.*, from the header that feeds water to the quench tower reservoirs). Conduct sampling under normal and representative operating conditions.

2) Determine the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in the sample using the applicable methods in 40 CFR Part 136 or an approved alternative method.

e. The permittee shall have particulate (PM_{10} and $PM_{2.5}$), sulfur oxides and VOC emissions tests performed on the C Battery quench tower outlet according to Site Level Condition IV.14 and at least once every two years thereafter to demonstrate compliance with the mass emission standard in Condition V.B.1.e above. Emission tests shall be conducted according to the methodologies specified in 40 CFR 60, Appendix A or methodologies approved by the Department. The permittee shall submit a stack test protocol to the Department for approval at least 45 days prior to the test dates [§2108.02.b & .e]

f. The Department reserves the right to require additional emissions testing sufficient to assure compliance with the terms and conditions of this permit. Such testing shall be performed in accordance with Article XXI §2108.02. (§2103.12.h.1)

3. Monitoring Requirements

a. Beginning on the first day compliance is required under Conditions V.A.1.u and V.A.1.v above {§63.7283}, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in Condition V.B.1.b.1)a) above {§63.7295(a)(1)(i)} by meeting the following requirements: [63.7333(f)]

1) Maintaining the TDS content of the water used to quench hot coke at 1,100 mg/L or less; and
2) Determining the TDS content of the quench water at least weekly according to the requirements in Condition V.B.2.b above {§63.7325(a)} and recording the sample results.

b. Beginning on the first day compliance is required under Conditions V.A.1.u and V.A.1.v above {§63.7283}, the permittee shall demonstrate continuous compliance with the constituent limit for quenching in Condition V.B.2.b.2) above §63.7295(a)(1)(ii) by meeting the following requirements: [63.7333(g)]

c. Maintaining the sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the

water used to quench hot coke at levels less than or equal to the site-specific limit approved by the Department; and

d. Determining the sum of the constituent concentrations at least monthly according to the requirements in Condition V.B.2.d {§63.7325(c)} and recording the sample results.

4. Record Keeping Requirements:

a. For each coke oven battery subject to the work practice standard for quenching in Condition V.B.6.a below {§63.7295(b)}, the permittee shall demonstrate continuous compliance according to the following requirements: [§2102.04.b.6; 63.7334(e)]

1) Maintaining baffles in each quench tower such that no more than 5 percent of the cross-sectional area of the tower is uncovered or open to the sky as required in Condition V.B.6.a.1) below {§63.7295(b)(1)};

2) Maintaining records that document conformance with the washing, inspection, and repair requirements in Condition V.B.6.a.2) below{§63.7295(b)(2)}, including records of the ambient temperature on any day that the baffles were not washed; and

3) Maintaining records of the source of makeup water to document conformance with the requirement for acceptable makeup water in Condition V.B.1.b.2) above {§63.7295(a)(2)}.

5. Reporting Requirements:

a. For each coke oven battery, the permittee has demonstrated initial compliance with the work practice standards for quenching in Condition V.B.6.a below{§63.7295(b)} if the permittee certifies in the notification of compliance status that the following requirements have been met: [§2102.04.b.6; 63.7327(e)]

1) The permittee has installed the required equipment in each quench tower; and

2) The permittee will meet each of the work practice requirements beginning no later than the compliance date that is specified in Conditions V.A.1.u and V.A.1.v above {§63.7283}.

b. The permittee shall submit a notification of compliance status containing the results of the quench water performance test (TDS or constituent limit) according to Condition V.B.5.d below{63.7340(e)(1).} [§2102.04.b.6; 63.7326(d)]

c. The permittee shall submit a notification of compliance status according to the requirements in Condition V.A.5.p.1) above {§63.7340(e)(1)}. [§2102.04.b.6; 63.7327(f)]

d. The permittee shall submit a notification of compliance status according to §63.9(h)(2)(ii) if a performance test, opacity observation, or other initial compliance demonstration is required to be conducted,. [§2102.04.b.6; 63.7340(e)]

1) For each initial compliance demonstration that does not include a performance test, the permittee shall submit the notification of compliance status before the close of business on the 30th calendar day following the completion of the initial compliance demonstration.

2) For each initial compliance demonstration that does include a performance test, the permittee shall submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following completion of the performance test according to §63.10(d)(2).

e. Semiannual compliance report contents. Each compliance report must provide information on compliance with the emission limitations, work practice standards, and operation and maintenance requirements for the quench tower. The reports must include the information in Conditions V.B.5.e.1) through V.B.5.e.3) below, and as applicable, Conditions V.B.5.e.4) through V.B.5.e.6) below. [§63.7341(c)]

1) Company name and address.

2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

3) Date of report and beginning and ending dates of the reporting period.

4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

5) If there were no deviations from the continuous compliance requirements in Conditions V.B.3.a and V.B.3.b above and V.B.4.a above{§§63.7333(f&g) and 63.7334(e)} (for the quench tower), a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.

6) For each deviation from an emission limitation in 40 CFR 63, Subpart CCCCC (including quench water limits) and for each deviation from the requirements for work practice standards in 40 CFR 63, Subpart CCCCC that occurs at the quench tower, the compliance report must contain the information in Conditions V.B.5.e.4) and V.B.5.e.6). This includes periods of startup, shutdown, and malfunction.

i. The total operating time of the quench tower during the reporting period.
ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.

f. Reporting instances of non-compliance in accordance with the Startup Shutdown Malfunction Plan, does not relieve the permittee of the requirement to report breakdowns in accordance with Site Level ConditionIV.8, if appropriate. (§2102.04.b.4)

6. Work Practice Standard

a. For each quench tower and each backup quench station, the permittee shall meet each of the following requirements: [§2102.04.b.6; 63.7295(b)]

1) The permittee shall equip each quench tower with baffles such that no more than 5 percent of the cross sectional area of the tower may be uncovered or open to the sky.

2) The permittee shall wash the baffles in each quench tower once each day that the tower is used

to quench coke, except as specified in Conditions V.B.6.a.2)i and V.B.6.a.2)ii:

i. The permittee not required to wash the baffles in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day (24-hour period). If the measured ambient temperature rises to 30 degrees Fahrenheit or more during the day, the permittee shall resume daily washing according to the schedule in your operation and maintenance plan.

ii. The permittee shall continuously record the ambient temperature on days that the baffles were not washed.

3) The permittee shall inspect each quench tower monthly for damaged or missing baffles and blockage.

4) The permittee shall initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable

b. As provided in §63.6(g), you may request to use an alternative to the work practice standards in Condition I.A.6.a above {§63.7295(b)}. [§2102.04.b.6; 63.7295(c)]

VI. ALTERNATIVE OPERATING SCENARIOS

No alternative operating scenarios exist for this Installation.

VII. EMISSION LIMITATIONS SUMMARY

Annual emissions (including fugitives) from Battery C equipment authorized by this permit are:

POLLUTANT	Tons/year
Particulate Matter	376.10
PM-10	275.5
PM-2.5	233.50
Sulfur Oxides	262.6
Nitrogen Oxides	633.60
Volatile Organic Compounds	123.40
Carbon Monoxide	1192.50
Benzene	4.57
Naphthalene	0.60
Cyanide Compounds	1.69
HCl	22.0